







CITY OF BIRMINGHAM

---

REPORT OF THE  
MEDICAL OFFICER  
OF HEALTH

FOR THE YEAR

1971







# CONTENTS

---

## PUBLIC HEALTH SERVICE

1. Members of the Health Committee
2. Functions of Sub-Committee of the Health Committee and other Committees
3. Staff of the Public Health Department.
4. Introduction by Medical Officer of Health
5. Vital Statistics
6. Epidemiology
7. Immunisation
8. Laboratory Services
  - (a) Analytical Laboratory
  - (b) Public Health Laboratory
9. Tuberculosis
10. Personal Health Services
  - (a) Care of Mothers and Young Children
  - (b) Personal and Child Health Dental Service
  - (c) Domiciliary Midwifery
  - (d) Health Visiting
  - (e) Home Nursing
  - (f) Ambulance Service
  - (g) Prevention of Illness, Care and After-care
  - (h) Health Education
11. Medical Services for Children in Care
12. National Assistance Acts
  - (a) Compulsory Removal
  - (b) Blind and Partially Sighted Persons
13. Staff Welfare: Cremation
14. Food Hygiene
15. Veterinary Services
16. Environmental Health Services
  - (a) Housing
  - (b) Public Health Inspection
  - (c) Sewerage and Drainage
  - (d) Refuse Collection and Disposal
  - (e) The City's Water Supply
  - (f) Personal Safety
  - (g) Industrial Premises
  - (h) Noise and Vibration Control
  - (i) Atmospheric Pollution Control

## SCHOOL HEALTH SERVICE

Members of the Special Services Sub-Committee of the Education Committee

1. General
2. Medical and Dental Inspection and Treatment
3. Handicapped Pupils
4. School Building and School Meals
5. Adult Examination
6. Miscellaneous

**Municipal Year, 1971-72**  
**MEMBERS OF THE HEALTH COMMITTEE**

---

*Chairman* COUNCILLOR J. D. BRYANT

THE LORD MAYOR (ALDERMAN VICTOR TURTON)

ALDERMAN E. J. FRANKLIN

ALDERMAN MRS. A. F. WOOD, C.B.E., J.P.

COUNCILLOR MRS. M. A. BROWN, J.P.

COUNCILLOR MRS. K. E. BULMER

COUNCILLOR J. CHARLTON

COUNCILLOR I. E. GILBERT

COUNCILLOR G. W. GRIFFITHS

COUNCILLOR E. F. HANSON

COUNCILLOR H. MINNIS

COUNCILLOR J. O. RHYDDERCH

COUNCILLOR H. N. SCRIMSHAW

COUNCILLOR A. TAYLOR

COUNCILLOR J. E. WALSH

*Finance and General Purposes Sub-Committee:*

*Chairman:*—COUNCILLOR J. D. BRYANT.

ALDERMAN MRS. A. F. WOOD.

COUNCILLORS MRS. M. A. BROWN, E. F. HANSON, J. O. RHYDDERCH AND H. N. SCRIMSHAW.

RESPONSIBILITIES:

To report upon matters referred to them by the Health Committee and to act when necessary on behalf of the City Council for the purpose of exercising certain powers and duties which the Council have delegated to the Sub-Committee.

Meetings—At the call of the Chairman.

OTHER COMMITTEES OF THE CITY COUNCIL CONCERNED WITH MATTERS OF PUBLIC HEALTH  
AND THE SOCIAL SERVICES

Baths Committee (provision of bathing establishments).

Education Committee (administration of junior special training centres).

Finance Committee and also the General Purposes Committee (financial provisions of the various enactments).

Fire Brigade Committee (Ambulance Service on an agency basis).

Housing Committee (slum clearance and provision and management of municipal houses).

Markets and Fairs Committee (regulation, control and management of markets and fairs).

Public Works Committee (*inter alia* in charge of all works in connection with public drains and sewers, paving, surfacing and maintenance of streets and roads, the lighting and cleansing of highways, etc.).

Salvage Committee (refuse disposal).

Social Services Committee (provision of the personal social services including services for old people and the handicapped, child protection, child delinquency, care of deprived children, fostering and adoption, mental health, day care of children under five, care of unsupported mothers and their children, home help services, temporary accommodation for homeless people, etc.).

Water Committee (provision of the City's water supply).

# STAFF OF THE PUBLIC HEALTH DEPARTMENT AS AT 31st DECEMBER, 1971

## *Medical Officer of Health and Principal School Medical Officer:*

E. L. M. MILLAR, C.B.E., M.Sc., M.D., Ch.B., D.P.H.

## *Deputy Medical Officer of Health and Deputy Principal School Medical Officer:*

W. NICOL, S.B.St.J., M.B., Ch.B., D.P.H.

## *Secretary Accountant:*

P. W. GREEN, F.C.I.S.

## *Senior Administrative Medical Officers for Personal and Child Health Services:*

N. M. JOHNSTON, L.R.C.P., L.R.C.S., D.P.H.

D. F. MAHON, M.B., B.Ch., B.A.O., D.P.H., B.Sc. (Public Health), L.M.

## *Deputy Senior Administrative Medical Officers for Personal and Child Health Services:*

I. C. AIDNEY, M.B., Ch.B.

J. E. PRESTON, M.B., Ch.B.

## *Senior Assistant Medical Officer for Personal and Child Health Services:*

E. O. WILLIAMS, M.B., Ch.B., D.P.H.

## *Senior Clinical Medical Officers for Child Health:*

E. D. MAY, M.B., B.Sc., D.C.H.

J. VACCARRO, M.B., B.Sc.

O. C. FURLONG, M.B., Ch.B., D.C.H.

J. B. MOLE, M.B., Ch.B., D.C.H.

## *Senior Administrative Medical Officer for Environmental Services:*

S. G. PHILLIPS, M.B., Ch.B., D.T.M., and H., D.Obst., R.C.O.G., D.P.H.

## *Deputy Senior Administrative Medical Officer for Environmental Services:*

M. SHRINAGESH, M.B., B.Sc., D.P.H., R.C.P. & S., Barrister-at-Law,

## *Medical Officer for Immunisation.*

S. WONG, M.B. B.Sc.

## *Medical Officer for Staff Welfare:*

J. J. LANDON, M.A., M.B., B.Chir.(Cantab.), M.R.C.S.(Eng.), L.R.C.P.(Lond.)

## *Chief Dental Officer*

F. J. HASTILOW, L.D.S.

## *City Analyst:*

A. H. COOMBES, B.Sc., F.R.I.C.

## *Chief Nursing Officer*

Miss P. GREENING, S.R.N., S.C.M., H.V.

## *Principal Nursing Officers*

Miss L. H. LINDAY, S.R.N., S.C.M., Q.N., H.V., D.N.A. (Aston).

Mrs. V. LUTWYCHE, S.R.N., S.C.M., D.N., H.V.

Mrs. J. SMITH, S.R.N., S.C.M., H.V.

*Chief Veterinary Officer:*

A. WILSON, M.R.C.V.S., D.V.S.M.

*Chief Public Health and Housing Inspector:*

E. N. WAKELIN, O.B.E., F.R.S.H., F.A.P.H.I.

*Chief Air Pollution and Noise Abatement Inspector:*

F. REYNOLDS, C.Eng., F.R.S.H., M.A.P.H.I., M.Inst.F.

SECRETARIAL AND ACCOUNTANCY

Secretary-Accountant .. .. .	1
Deputy Secretary-Accountant .. .. .	1
Administrative Assistants .. .. .	2
Senior Assistant Accountant .. .. .	1
Assistant Accountant .. .. .	1
Staff Officer .. .. .	1
Senior Administrative Assistant, Building Maintenance and Supplies .. .. .	1
Administrative, Accountancy and Clerical Staff .. .. .	94

PERSONAL AND CHILD HEALTH SERVICES

Senior Administrative Medical Officers for Personal and Child Health Services ..	2
Deputy Senior Administrative Medical Officers for Personal and Child Health Services	2
Senior Assistant Medical Officer for Personal and Child Health Services .. ..	1
Senior Clinical Medical Officers for Child Health .. .. .	4
Medical Officers in Department (16 full-time, 9 part-time) .. .. .	25

*Personal and Child Health and Associated Staff*

Chief Nursing Officer .. .. .	1
Principal Nursing Officers .. .. .	3
Acting Area Nursing Officer .. .. .	1

	<i>Full-time</i>	<i>Part-time</i>
Health Visitors .. .. .	116	20
Health Visitors (Geriatric Section) .. .. .	6	3
Student Health Visitors .. .. .	22	—
Clinic Nurses .. .. .	3	14
Chiropodist .. .. .	—	4
Physiotherapists .. .. .	2	17
School Nurses .. .. .	59	7
Nursing Assistants .. .. .	23	—
Speech Therapists .. .. .	7	4



*Home Nursing Service*

District Nurse Tutors .. .. .	2
Nursing Staff (full-time 220, part-time 17) .. .. .	237
Nursing Staff (Geriatrics) .. .. .	7

*Dental*

Chief Dental Officer .. .. .	1
Senior Divisional Dental Officer .. .. .	1
Divisional Dental Officers .. .. .	3
Senior (Orthodontic) Dental Officer .. .. .	1
Senior (Periodontic) Dental Officer .. .. .	1
Senior (Endodontic) Dental Officer .. .. .	1
Senior (Surgery) Dental Officer .. .. .	1
Senior Dental Officers .. .. .	6
Assistant Dental Officers (full-time 4, part-time 30) .. .. .	34
Dental Technicians .. .. .	2
Dental Surgery Assistants (34 full-time, 15 part-time) .. .. .	49
Dental Hygienist .. .. .	1
Dental Auxiliaries (7 full-time, 1 part-time) .. .. .	8

*Midwives*

Supervisors .. .. .	2
Midwives (full-time 104, part-time 19) .. .. .	123

<i>Clerical Staff</i> .. .. .	39
-------------------------------	----

*Miscellaneous Staff*

Non-manual (full-time and part-time) .. .. .	72
Manual .. .. .	121

## GENERAL PURPOSES

Administrative Medical Officer of Health .. .. .	1
Deputy Administrative Medical Officer of Health (in conjunction with Health Education and Immunisation) .. .. .	1
Clerical Staff .. .. .	4

*Health Education*

Organiser .. .. .	1
Assistant Organiser .. .. .	1
Artist .. .. .	1



### *Immunisation*

Medical Officer for B.C.G. Vaccination .. .. .	1
Nurse Administrator of the Immunisation Section .. .. .	1
Nursing Staff .. .. .	2
Medical and Nursing Staff (part-time) .. .. .	12
Clerical Staff (32 full-time, 1 part-time) .. .. .	33
Temporary Clerical Staff ( part-time) .. .. .	1

### TUBERCULOSIS

#### (Prevention and After-Care)

Tuberculosis Visitors .. .. .	6
Clerical Staff .. .. .	4

### STAFF WELFARE SURGERIES

Medical Officer for Staff Welfare .. .. .	1
Nursing Staff (1 full-time) .. .. .	2

### VETERINARY OFFICERS AND FOOD INSPECTORS

Chief Veterinary Officer .. .. .	1
Deputy Chief Veterinary Officer .. .. .	1
Assistant Chief Veterinary Officer .. .. .	—
Senior Food Inspectors .. .. .	3
Authorised Meat Inspectors .. .. .	15
Trainee Meat Inspectors .. .. .	—
Clerical Staff .. .. .	3
Miscellaneous Manual Staff .. .. .	4

### PUBLIC HEALTH AND HOUSING INSPECTORS

Chief Public Health and Housing Inspector .. .. .	1
Deputy Chief Public Health and Housing Inspector .. .. .	—
Assistant Chief Public Health Inspector (Housing) .. .. .	1
Assistant Chief Public Health Inspector (General) .. .. .	1
Divisional Public Health Inspectors .. .. .	4
District Public Health Inspectors .. .. .	12
Senior Rodent Officer .. .. .	1
Senior Shops Act Inspector .. .. .	1
Enforcement Officers .. .. .	2
Inspectorial Staff .. .. .	65
Technical Assistants .. .. .	16
Water Sampling Officer .. .. .	1
Pupil Public Health Inspectors .. .. .	18
District Food Inspectors .. .. .	7
Rodent Inspectors .. .. .	8
Pest Officers .. .. .	12
Clerical Staff .. .. .	42
Miscellaneous Manual Staff .. .. .	11

## AIR POLLUTION AND NOISE ABATEMENT INSPECTORS

Chief Air Pollution and Noise Abatement Inspector	..	..	..	..	..	..	..	..	1
Deputy Chief Air Pollution and Noise Abatement Inspector	..	..	..	..	..	..	..	..	1
Divisional Air Pollution and Noise Abatement Inspectors	..	..	..	..	..	..	..	..	4
Senior Smoke Control Area Advisers	..	..	..	..	..	..	..	..	2
Smoke Control Area Advisers	..	..	..	..	..	..	..	..	16
Clerical Staff	..	..	..	..	..	..	..	..	26

## SAMPLING INSPECTORS

Senior Sampling Officer	..	..	..	..	..	..	..	..	1
Deputy Senior Sampling Officer	..	..	..	..	..	..	..	..	1
Milk Samplers	..	..	..	..	..	..	..	..	3

## ANALYTICAL LABORATORY

City Analyst..	..	..	..	..	..	..	..	..	1
Deputy City Analyst	..	..	..	..	..	..	..	..	1
Research Chemist	..	..	..	..	..	..	..	..	1
Laboratory Staff	..	..	..	..	..	..	..	..	11
Clerical Staff	..	..	..	..	..	..	..	..	2

## MISCELLANEOUS STAFF

Manual Workers (Laundry Workers, Drivers, Storemen, Cleaners etc.)	..	..	..	..	..	..	..	..	152
--	----	----	----	----	----	----	----	----	-----

PUBLIC HEALTH DEPARTMENT,  
TRAFALGAR HOUSE,  
PARADISE CIRCUS QUEENSWAY,  
BIRMINGHAM, B1 2BQ.

15th November, 1972.

*To the Chairman and Members,  
Health Committee.*

The year 1971 will be remembered for the setting up of Social Services Departments on 1st January, 1971 and for the transfer to them from Public Health Departments of day nurseries, supervision of private nurseries and child minding, provision of home helps, arrangements for the care of unmarried mothers and the local health authorities' mental health service, together with the senior training centres. In Birmingham the transfer was arranged in a gradual manner, it being necessary for officers of the two departments to work together for some time in order to give to those newly taking up responsibility for the transferred services the benefit of the "know how" that the Public Health Department had acquired over a long number of years. Services were transferred as complete working units and, so far as was possible, together with their senior officers. This minimised the loss of expertise.

Junior training centres became part of the special schools system on 1st April, 1971, under the Education (Handicapped Children) Act 1970. Birmingham had considered for many years that an educational setting is the right one and had implemented this by having the Education Committee running the junior training centres as agent for the Health Committee whose statutory responsibility they were.

The above changes, together with a reorganisation of the nursing services in accordance with the Mayston Report, gave the opportunity for a review of the Health Department's administrative services. The medical and nursing services, especially after the school health and maternity and child welfare services had combined, were found to be particularly in need of a senior lay administrator who could devote himself to combining the services at all levels and ensure that doctors and nurses are receiving the maximum support from lay staff and having full regard to economy in man power. An Assistant Secretary was therefore appointed to each of the three services: medical, dental and nursing; environmental; and finance, staffing, building maintenance and supplies.

This annual report volume for 1971 contains for the first time the report upon the School Health Service. Such an arrangement eliminates duplication of some information in each of two hitherto separate reports. Information upon the services transferred to the Education and Social Services Departments of course no longer appears.

On the day of writing, the 1971 Census report became available and it is noted that 1,014,670 persons were actually enumerated in Birmingham. The rates in this report have, however, already been calculated in the estimated Birmingham population of 1,013,420. The only local authority area in Warwickshire whose population has fallen since the 1961 census is Birmingham. The fall has been 8.6 per cent as compared with a rise of 15.6 per cent and 14.8 per cent for our immediate neighbours Solihull and Sutton Coldfield and a rise of 25.9 per cent for the administrative county which excludes Birmingham, Coventry and Solihull.

There was a dramatic fall in live births, from 18,142 in 1970 to 16,950 in 1971. However, because of a fall in estimated population from 1970 to 1971 of 70,760 the births per 1,000 population (birth rate) remained at 16.7 for each of the two years. The infant mortality rate, at 20.35, has only once been better. That was in 1967 when it was 19.78 deaths in the first year of life per 1,000 live births. The perinatal mortality rate of 24.90 was, however, by a margin of 0.75, the lowest ever achieved in Birmingham. There were two maternal deaths (excluding abortion) in 1971; a low figure only once before achieved. That was in 1969. These record figures demonstrate the steady improvement of the midwifery services in this City.

Although 1970 gave a record high figure of 728 deaths from lung cancer, there were 614 deaths in 1971. It was 1964 when a figure lower than this was recorded. It would take some years for diminished smoking to show itself in smaller numbers of deaths, but this may indicate at long last that some people are taking advice. I myself am impressed by the few who nowadays smoke at medical and scientific meetings. People who attend such meetings are certainly impressed by the enormous weight of evidence against smoking.

Another success story is the continuing integration of the nursing and general practitioner services. In a three year period the items of service by district nurses on practice premises have risen from 53,027 to 105,062.

Repeated warnings about the potential peril of neglecting immunisation of children failed to avert the occurrence of two cases of diphtheria. As usual, the incident had the value of stimulating parental interest in protection. The year 1971 will, however, be notable for the cessation of routine vaccination against smallpox.



Further substantial progress is reported in reducing tuberculosis. There were 521 new notifications, being 70 less than the previous low record of 591 in 1969. Scabies continues as a common disease, but perhaps many cases come to notice because the Health Committee provides good and convenient facilities for treatment which are not available in many areas.

A very substantial programme for the monitoring of environmental contamination by lead is being developed in Birmingham and is attracting interest and, what is most acceptable, practical participation by scientists within and outside the City. We know of no similar co-ordinated assessment of this problem being undertaken anywhere in the world.

It is gratifying to find how Birmingham attracts such participation and how the City Council maintains its long tradition of leading the attack upon health problems of many kinds. One hopes that the arrangements for reorganising the National Health Service and local government in 1974, which will split the present Public Health Department in three directions, will not destroy this pioneering spirit in the field of public health.

E. L. M. MILLAR,

*Medical Officer of Health.*

## VITAL STATISTICS

### Area

There was no alteration in the area of the City, which remained at 51,598 acres or approximately 81 square miles.

### Population

Census 1961	..	..	..	..	..	..	..	1,107,187
Home population estimated by the Registrar General at 30th June (civilians plus H.M. Forces stationed in the area).	}	1966						1,102,570
		1967						1,101,990
		1968						1,074,940
		1969						1,086,400
N.B. The population recorded in 1971 Census was published on 15.11.72 as being 1,014,670.	}	1970						1,084,180
		1971						1,013,420

It will be noted that the 1971 estimate of population shows a reduction of over 70,000 in the figure for 1970. A significant factor in this lower estimate could be the re-housing of former Birmingham residents in the new development at Chelmsley Wood, in the Meriden Rural District and the consequent increase in the estimate of population for the latter authority from 62,000 in 1970 to 102,000 in 1971. Although the number of births has decreased by over 1,000 the rate remains the same as that for 1970.

Density—19·8 persons per acre.

**Rateable Value** (at 1/4/72) £55,203,866.

Penny rate produces £518,500.

### Live Births

<i>Number</i>		1967	1968	1969	1970	1971
(a) Born in the City	.. ..	20,564	19,582	18,614	17,708	16,488
(b) Born outside the City	.. ..	471	674	385	434	462
		<u>21,035</u>	<u>20,256</u>	<u>18,999</u>	<u>18,142</u>	<u>16,950</u>

### LIVE BIRTH RATE

16·73 per 1,000 population.

### Illegitimate Live Births

These numbered 1,984 representing 11·70 per cent of the total live births. Although the number of illegitimate live births has decreased from the previous year, the percentage of live births has increased by 0·5 per cent. The following table sets out the percentage of locally recorded illegitimate live births in recent years.

1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
8·9%	10·2%	10·4%	10·5%	10·3%	10·6%	10·7%	10·7%	11·1%	11·2%	11·7%

The number of illegitimate live births recorded in the City varies from the figures supplied by the Registrar General. From that source the percentage of illegitimate live births was 12·3 of the total live births. Local information cannot take into account the registration of births of illegitimate children to Birmingham women outside the City, information which is available to the Registrar General. This would explain the difference in the two percentages and the fact that the figure supplied by the Registrar General is always the greater.

The following table shows the comparable rates for England and Wales and other large towns.

			<i>Birmingham</i>	<i>Leeds</i>	<i>Liverpool</i>	<i>Manchester</i>	<i>England and Wales</i>
1968	..	..	11·7	12·4	11·1	17·4	8·5
1969	..	..	12·1	13·0	11·4	17·9	8·4
1970	..	..	12·0	13·3	11·5	18·3	8·0
1971	..	..	12·3		Not yet available		8·4

### Stillbirth Rate

There were 241 stillbirths, giving a rate of 14·02 per 1,000 (live and still) births.

**Total births** (live and still) 17,191.

## INFANT MORTALITY RATE

**Infant deaths** under 1 year of age.

Legitimate	..	..	282	Illegitimate	..	..	63
------------	----	----	-----	--------------	----	----	----

Total infant deaths were 345, 43 less than in 1970, giving a rate of 20·35 per 1,000 live births.

<i>1962</i>	<i>1963</i>	<i>1964</i>	<i>1965</i>	<i>1966</i>	<i>1967</i>	<i>1968</i>	<i>1969</i>	<i>1970</i>	<i>1971</i>
22·8	23·6	21·4	22·0	21·2	19·8	22·5	21·2	21·4	20·35

### INFANT MORTALITY IN ZONES OF THE CITY

		<i>1962</i>	<i>1963</i>	<i>1964</i>	<i>1965</i>	<i>1966</i>	<i>1967</i>	<i>1968</i>	<i>1969</i>	<i>1970</i>	<i>1971</i>
Inner	..	30	29	24	31	21	22	31	24	28	24
Middle	..	25	26	23	23	24	22	26	25	23	26
Outer	..	18	18	19	18	18	17	17	17	18	15

Legitimate infant deaths per 1,000 (legitimate) live births.

<i>1967</i>	<i>1968</i>	<i>1969</i>	<i>1970</i>	<i>1971</i>
19·10	22·44	20·96	19·18	18·84

Illegitimate infant deaths per 1,000 (illegitimate) live births.

1967	1968	1969	1970	1971
25.39	23.12	22.78	34.00	31.75

EARLY NEONATAL DEATH RATE

(deaths in first 7 days)

1967	1968	1969	1970	1971
12.21	12.09	12.32	13.76	11.03

NEONATAL DEATH RATE

(deaths in first 4 weeks)

1967	1968	1969	1970	1971
13.59	15.01	13.74	15.71	12.80

POST NEONATAL DEATH RATE

(deaths in the 1st year excluding first 4 weeks)

1967	1968	1969	1970	1971
6.18	7.50	7.42	5.68	7.49

PERINATAL DEATH RATE

(Stillbirths plus deaths in the 1st week)

1967	1968	1969	1970	1971
28.29	26.63	25.63	27.50	24.90

INFANT MORTALITY 1971

<i>Cause of death</i>	<i>Early Neo- natal</i>	<i>7-28 Days</i>	<i>Total Neo- natal</i>	<i>Post Neo- natal</i>	<i>Total Infant Deaths</i>
Enteritis and other diarrhoeal diseases ..	—	2	2	12	14
Measles .. .. .	—	—	—	1	1
Meningitis (including Meningococcal infection) .. .. .	1	1	2	1	3
Pneumonia .. .. .	10	4	14	28	42
Bronchitis .. .. .	—	—	—	3	3
Whooping Cough .. .. .	—	—	—	2	2
Neoplasms .. .. .	2	—	2	2	4
Congenital anomalies .. .. .	41	9	50	19	69
Birth injury, difficult labour .. .. .	17	2	19	—	19
Atelectasis, asphyxia, respiratory distress	41	1	42	2	44
Other causes of neonatal mortality ..	71	5	76	—	76
Accidents .. .. .	1	1	2	6	8
All other external causes .. .. .	1	—	1	1	2
All other diseases .. .. .	2	6	8	50	58
	187	31	218	127	345



## Maternal Mortality

NUMBER OF DEATHS (abortions 1) 3

RATES per 1,000 live and still births

Including abortions, 0·17

Excluding abortions 0·12

### MATERNAL DEATHS (excluding abortions)

1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
4	6	3	8	6	6	6	6	2	6	2

**Death Rate** from all causes was 11·49 per 1,000 population, the total number of deaths being 11,645. This is a decrease of 309 compared with the total for 1970 when the rate was 11·03.

The principal causes of death are set out in the table below:—

	<i>Heart disease</i>	<i>Cancer</i>	<i>Cerebro- vascular disease</i>	<i>Pneumonia Bronchitis Influenza</i>	<i>Arterio- sclerosis and circulatory disease</i>	<i>Violence and Suicide</i>
1962	3,783	2,323	1,697	1,771	490	565
1963	3,737	2,390	1,783	1,661	564	647
1964	3,442	2,297	1,640	1,541	616	614
1965	3,661	2,460	1,781	1,499	598	592
1966	3,584	2,451	1,670	1,794	476	619
1967	3,670	2,539	1,811	1,283	425	527
1968	3,779	2,608	1,794	1,657	468	487
1969	3,880	2,557	1,662	2,037	361	524
1970	3,657	2,588	1,611	1,729	557	536
1971	3,534	2,533	1,625	1,508	523	551
% of all deaths in 1971	30·35	21·75	13·95	12·95	4·49	4·73

Of the 551 deaths from violence and suicide, 83 were due to the latter cause.

## Ischaemic heart disease as cause of death

1966	Male	1,319	
	Female	842	2,161
1967	Male	1,386	
	Female	822	2,208
1968	Male	1,471	
	Female	980	2,451
1969	Male	1,604	
	Female	980	2,584
1970	Male	1,576	
	Female	1,079	2,655
1971	Male	1,483	
	Female	1,048	2,531

## AGES AT DEATH FROM ISCHAEMIC HEART DISEASE

Age Group							Male	Female	Total
20 - 24	..	..	..	..	..	..	1	—	1
25 - 29	..	..	..	..	..	..	1	—	1
30 - 34	..	..	..	..	..	..	3	1	4
35 - 39	..	..	..	..	..	..	10	2	12
40 - 44	..	..	..	..	..	..	32	10	42
45 - 49	..	..	..	..	..	..	71	8	79
50 - 54	..	..	..	..	..	..	113	20	133
55 - 59	..	..	..	..	..	..	182	44	226
60 - 64	..	..	..	..	..	..	224	72	296
65 - 69	..	..	..	..	..	..	282	93	375
70 - 74	..	..	..	..	..	..	192	176	368
75 - 79	..	..	..	..	..	..	179	202	381
80 - 84	..	..	..	..	..	..	112	199	311
85 years +	..	..	..	..	..	..	81	221	302
TOTAL	..	..	..	..	..	..	1,483	1,048	2,531

No deaths occurred in the age groups 0-19 years.

## Area Comparability Factors

Births .. .. . 0.99      Deaths .. .. . 1.15

Crude birth and death rates are not satisfactory rates in themselves for comparative purposes because each area varies in the age and sex structure of its population. In order to make comparisons of birth and death rates between one

area and another the device known as the Area Comparability Factor which eliminates the age and sex difference of the local populations is applied by multiplying the local crude rate by the factor. The Adjusted Birth Rate was 16.56 per 1,000 population and the Adjusted Death Rate 13.21.

## Cancer

Total deaths from this cause were 2,533, 55 less than in 1970 giving a mortality rate of 2.50 compared with 2.39 for the previous year.

	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
Deaths ..	2,323	2,390	2,297	2,460	2,451	2,539	2,608	2,557	2,588	2,533
Rate ..	2.08	2.14	2.08	2.23	2.22	2.30	2.43	2.35	2.39	2.50

## Deaths from Cancer of the Lung and Bronchus

There were 614 deaths or 24.24 per cent of the total deaths from cancer, related to the lung and bronchus. It is pleasing to note a considerable decrease of 97, or over 16 per cent, in male deaths compared with the figure for 1970, and of 17, or over 13 per cent, in female deaths.

The following table shows the age and sex structure of these deaths. Of the overall reduction of 114, 110 fell within the age categories 55-69 years.

Age Group							Male	Female	Total
30 - 34	..	..	..	..	..	..	1	—	1
35 - 39	..	..	..	..	..	..	4	—	4
40 - 44	..	..	..	..	..	..	6	1	7
45 - 49	..	..	..	..	..	..	21	11	32
50 - 54	..	..	..	..	..	..	53	12	65
55 - 59	..	..	..	..	..	..	47	10	57
60 - 64	..	..	..	..	..	..	99	16	115
65 - 69	..	..	..	..	..	..	101	20	121
70 - 74	..	..	..	..	..	..	96	17	113
75 - 79	..	..	..	..	..	..	53	12	65
80 - 84	..	..	..	..	..	..	16	8	24
85 years +	..	..	..	..	..	..	6	4	10
TOTAL	..	..	..	..	..	..	503	111	614

The following table denotes the number of deaths from cancer of the lung and bronchus over the past ten years.

	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
Males	496	578	513	562	544	587	612	579	600	503
Females	80	76	78	88	89	95	102	111	128	111
TOTALS	576	654	591	650	633	682	714	690	728	614

### Deaths from other forms of Cancer

Deaths from cancer of the stomach and intestines totalled 605, 321 being men and 284 women. There were 256 deaths from cancer of the breast of which one was male. There were 55 leukaemia deaths and 55 deaths from cancer of the cervix uteri, age groups in the latter category being shown in the following table for the period 1968-71 inclusive.

#### AGE AT DEATH FROM CANCER OF CERVIX UTERI

Age Group	1968	1969	1970	1971
15 - 19 .. .. .	—	—	1	—
20 - 24 .. .. .	—	1	—	—
25 - 29 .. .. .	1	—	—	—
30 - 34 .. .. .	—	1	3	1
35 - 39 .. .. .	—	1	3	2
40 - 44 .. .. .	9	2	1	2
45 - 49 .. .. .	9	5	11	9
50 - 54 .. .. .	8	3	6	8
55 - 59 .. .. .	10	11	3	8
60 - 64 .. .. .	4	5	7	3
65 - 69 .. .. .	5	6	7	8
70 - 74 .. .. .	5	1	8	4
75+ .. .. .	15	5	3	10
	<hr/>	<hr/>	<hr/>	<hr/>
	66	41	53	55
	<hr/>	<hr/>	<hr/>	<hr/>

## Accidents

There were 415 fatal accidents, 223 occurring to males and 192 to females, accounting for 3·6 per cent of all deaths. This represents a decrease of 18 on the figure for 1970 and includes fatalities occurring outside the City to Birmingham residents.

Fatal accidents occurring at home amounted to 162 or 39 per cent of all accidental deaths: 131 of them involved children under 5 years and adults of 65 years and over.

Deaths from road accidents totalled 151, 111 of these resulting from accidents in Birmingham.

Recent fatal road accident figures are set out in the following table.

1964	1965	1966	1967	1968	1969	1970	1971
191	193	188	141	141	148	166	151

Accidents occurring on the road and in the course of employment were fatal to 70 males and 16 females between the ages of 5 and 45 years. Accidents to persons of 65 and over caused 210 deaths, being 50·6 per cent of all deaths due to accidents. There were 13 less deaths in this age group than in 1970.

The table below shows the number of people who died in all accidents, classified under various headings:

<i>Type of Accident</i>	<i>(a) Total Deaths</i>	<i>(b) No. in column (a) 65 years and over</i>	<i>(c) (b) as % of (a)</i>
Falls on the same level .. .. .	149	130	87·2
Falls downstairs .. .. .	19	13	68·4
Pedestrians killed by motor vehicles ..	68	29	42·6
Other road accidents .. .. .	83	9	10·8
Coal gas poisoning .. .. .	10	8	80·0
Burns and electricity .. .. .	14	3	21·4
Other accidents .. .. .	72	18	25·0

Column (b) shows "falls on the same level" to be the greatest cause of fatal accidents among the elderly accounting for 61·9 per cent of them. Pedestrians aged 65 and over involved with motor vehicles resulted in 13·8 per cent of accidental deaths in this age group.



## MORTALITY RATES OF LEGITIMATE AND ILLEGITIMATE BABIES

		Stillbirth rate	Early neonatal mortality rate	Perinatal mortality rate	4 weeks neo-natal mortality rate	Post neonatal mortality rate	Total infant mortality rate
1971	Legitimate	...	10.49	...	12.09	6.75	18.84
	Illegitimate	...	15.12	...	18.65	13.10	31.75
	Total ...	14.02	11.03	24.90	12.86	7.49	20.35
1970	Legitimate	...	12.29	...	14.15	5.64	19.80
	Illegitimate	...	25.63	...	28.10	5.91	34.00
	Total ...	13.91	13.78	27.50	15.71	5.68	21.39
1969	Legitimate	...	12.25	...	13.73	7.22	20.96
	Illegitimate	...	12.81	...	13.76	9.02	22.78
	Total ...	13.50	12.32	25.65	13.74	7.42	21.16
1968	Legitimate	...	12.48	...	14.73	7.63	22.44
	Illegitimate	...	12.95	...	16.65	6.47	23.12
	Total ...	14.11	12.09	26.23	15.01	7.50	22.51
1967	Legitimate	...	11.49	...	12.77	6.33	19.10
	Illegitimate	...	18.26	...	20.49	4.90	25.39
	Total ...	16.27	12.21	28.29	13.59	6.18	19.78
1966	Legitimate	...	11.71	...	13.68	6.81	20.49
	Illegitimate	...	16.16	...	18.85	8.53	27.38
	Total ...	17.29	12.18	29.27	14.23	7.00	21.22
1965	Legitimate	...	11.80	...	13.97	7.14	21.12
	Illegitimate	...	18.81	...	20.60	9.40	30.00
	Total ...	17.23	12.53	29.63	14.66	7.38	22.03
1964	Legitimate	...	11.88	...	13.78	6.74	20.52
	Illegitimate	...	18.24	...	20.36	8.90	29.26
	Total ...	17.47	12.60	29.80	14.47	6.97	21.44
1963	Legitimate	...	12.30	...	14.45	7.75	22.19
	Illegitimate	...	18.93	...	22.38	13.34	35.71
	Total ...	18.89	12.99	31.64	15.27	8.33	23.6

CRUDE RATES

<i>Year</i>	BIRTH RATE		STILLBIRTH RATE		INFANT MORTALITY RATE		DEATH RATE	
	<i>B'ham</i>	<i>England &amp; Wales</i>	<i>B'ham</i>	<i>England &amp; Wales</i>	<i>B'ham</i>	<i>England &amp; Wales</i>	<i>B'ham</i>	<i>England &amp; Wales</i>
1941	16·8	13·9	29	35	69	60	13·2	13·5
1946	22·5	19·2	25·6	27	40	42·8	11·3	12·0
1951	16·5	15·5	22·2	23	30	29·6	11·4	12·5
1953	16·6	15·6	22·9	23	24·6	23·7	10·9	11·7
1957	17·1	16·1	21·5	22	24·6	23·1	11·2	11·5
1958	17·6	16·4	22·0	22	25·0	22·5	11·0	11·7
1959	17·7	16·5	21·1	21	25·4	22·2	11·6	11·6
1960	19·0	17·0	19·9	20	22·6	21·8	11·0	11·5
1961	19·5	17·6	20·1	19	23·8	21·4	11·4	12·0
1962	20·0	18·0	19·0	18	22·8	21·7	11·1	11·9
1963	20·0	18·2	18·9	17	23·6	21·1	11·3	12·2
1964	20·2	18·4	17·5	16	21·4	19·9	10·7	11·3
1965	19·6	18·0	17·2	16	22·0	19·0	11·1	11·5
1966	19·1	17·7	17·3	15	21·2	19·0	11·1	11·7
1967	19·1	17·2	16·3	15	19·8	18·3	10·8	11·2
1968	18·8	16·9	14·1	14	22·5	18·3	11·6	11·9
1969	17·5	16·3	13·5	13	21·2	18·0	11·6	11·8
1970	16·7	16·0	14·0	13	21·4	18·0	11·0	11·7
1971	16·7	16·0	14·0	12	21·3	18·0	11·5	11·6

## VITAL STATISTICS DURING 1971 AND PREVIOUS YEARS

YEAR	Population Estimated to middle of each year	Birth rate	Death rate	Area Comparison Birth Factors		INFANT DEATH RATES PER 1,000 LIVE BIRTHS										DEATH RATES PER 1,000 OF POPULATION FROM—									
				Deaths	Births	Infant Mortality	Early Neonatal (first week)	Neonatal (first month)	Post-neonatal (1—12 months)	Diarrhoea and Enteritis (under 2 yrs)	Stillbirths	Perinatal **	Maternal (including abortions)	Influenza	Respiratory	Other Types	Cancer	Diseases of Nerve System	Diseases of (Circulatory) System	Diseases of Respiratory System	Diseases of Digestive (Urinary) System	Suicides	Other Violence		
1937	1,032,000	21.3	11.7	1.10	1.10	0.9	24.3	31.0	28.9	1.1	34.6	58.1	2.95	-4.0	7.2	0.8	1.62	0.73*	3.40	1.40	5.9	4.5	3.9		
1938	1,048,000	16.6	10.9	1.10	1.10	6.0	20.7	26.7	32.8	13.7	34.7	56.0	2.71	1.5	1.70	0.8	1.59	0.61*	3.45	1.18	6.1	4.5	3.4		
1939	1,055,000	16.6	11.4	1.10	1.10	6.0	20.7	26.3	32.8	13.7	36.0	56.0	2.48	1.6	1.77	0.8	1.59	0.67*	3.65	1.16	4.3	3.9	3.6		
1940	1,020,000	16.9	14.3	1.11	1.11	6.3	21.9	28.5	34.0	12.1	32.8	51.7	2.21	2.2	1.77	0.7	1.81	0.61*	3.31	2.21	4.5	3.9	3.6		
Average	1,064	16.4	11.9	1.11	1.11	6.3	21.9	28.5	34.0	12.1	32.8	53.0	2.77	1.5	1.77	0.7	1.81	0.80*	3.45	1.43	5.6	4.4	3.8		
1941	950,000	16.8	13.2	1.11	1.11	6.9	20.5	29.1	39.9	11.3	29.1	49.0	2.49	1.5	1.81	0.9	1.70	1.30*	3.10	1.94	7.2	4.5	4.2		
1942	965,000	19.3	11.8	1.11	1.11	5.5	17.9	25.7	29.3	9.8	28.4	48.0	2.34	1.0	1.77	0.7	1.70	1.28*	3.02	1.73	4.6	4.5	4.1		
1943	965,000	20.9	12.1	1.11	1.11	5.5	17.9	25.7	29.3	9.1	27.4	44.6	1.69	1.1	1.77	0.9	1.83	1.29*	3.15	1.40	4.3	4.2	4.0		
1944	990,000	22.8	11.3	1.11	1.11	4.2	15.4	22.2	29.3	6.0	24.5	39.1	1.34	1.1	1.68	0.7	1.75	1.29*	3.02	1.40	4.3	4.2	4.0		
1945	990,000	19.9	11.2	1.11	1.11	5.4	18.2	25.9	28.3	7.8	24.8	41.3	1.41	0.6	1.68	0.7	1.75	1.29*	3.11	1.44	4.1	4.1	3.4		
Average	1,017,100	19.9	11.9	1.11	1.11	5.4	18.2	25.9	28.3	7.8	26.8	44.5	1.85	1.5	1.68	0.7	1.75	1.29*	3.11	1.60	5.4	4.3	3.4		
1946	1,017,100	22.5	11.3	1.13	1.13	4.1	17.3	22.1	17.9	6.1	25.6	42.2	0.98	0.8	1.61	0.5	1.83	1.32*	3.36	1.37	4.4	3.6	3.2		
1947	1,076,230†	22.2	11.1	1.13	1.13	3.2	16.3	18.0	19.8	7.1	23.8	39.1	0.85	0.8	1.61	0.5	1.83	1.32*	3.36	1.37	4.4	3.6	3.2		
1948	1,096,100†	19.5	9.8	1.13	1.13	3.2	16.3	18.0	13.6	3.2	21.7	37.7	0.50	0.49	1.54	0.4	1.82	1.10*	3.00	1.10	3.2	3.3	3.2		
1949	1,086,800†	18.1	10.7	1.13	1.13	3.1	15.0	17.7	13.1	3.2	21.7	30.4	0.49	0.49	1.54	0.4	1.82	1.10*	3.00	1.10	3.2	3.3	3.2		
1950	1,117,900†	16.8	10.9	1.12	1.12	3.0	16.4	19.2	10.9	2.2	23.0	30.8	0.83	0.7	1.54	0.4	1.82	1.10*	3.00	1.10	3.2	3.3	3.2		
Average	1,117,900†	16.8	10.9	1.12	1.12	3.0	16.4	19.2	10.9	2.2	23.0	30.8	0.83	0.7	1.54	0.4	1.82	1.10*	3.00	1.10	3.2	3.3	3.2		
1951	1,110,900†	16.5	11.4	1.12	1.12	3.0	15.9	19.2	10.5	1.6	22.6	37.6	0.75	0.6	1.24	0.2	1.82	1.40*	3.67	1.30	3.5	2.8	3.0		
1952	1,119,000†	16.4	10.2	1.12	1.12	2.7	15.6	17.6	9.2	1.3	19.6	33.3	0.80	0.3	1.25	0.2	1.82	1.40*	3.67	1.30	3.5	2.8	3.0		
1953	1,118,500†	16.6	10.6	1.14	1.14	2.6	15.1	18.0	8.1	1.1	23.5	37.9	0.75	0.6	1.24	0.2	1.82	1.40*	3.67	1.30	3.5	2.8	3.0		
1954	1,117,700†	16.4	10.6	1.14	1.14	2.6	15.1	18.0	7.4	0.7	21.6	35.1	0.80	0.3	1.24	0.2	1.82	1.40*	3.67	1.30	3.5	2.8	3.0		
1955	1,111,700†	16.0	11.3	1.13	1.13	2.4	13.0	16.3	7.4	0.8	22.0	35.7	0.83	0.7	1.43	0.3	1.88	1.40*	3.67	1.30	3.5	2.8	3.0		
Average	1,111,700†	16.4	10.8	1.13	1.13	2.6	14.7	17.6	8.5	1.1	22.0	35.3	0.65	0.6	1.19	0.2	1.97	1.58*	3.55	1.28	3.9	2.3	3.1		
1956	1,110,800†	16.6	10.9	1.08	1.08	2.5	14.8	17.6	7.0	1.0	22.9	37.0	0.63	0.4	1.14	0.1	2.08	1.58*	3.46	1.29	3.8	2.1	3.3		
1957	1,103,000†	17.1	11.2	1.09	1.09	2.5	15.8	17.7	7.0	0.3	21.5	37.4	0.40	0.1	1.12	0.1	2.08	1.58*	3.46	1.29	3.8	2.1	3.3		
1958	1,095,000†	17.6	11.0	1.10	1.10	2.5	16.0	17.9	7.1	0.4	22.0	37.8	0.40	0.1	1.13	0.1	2.10	1.58*	3.46	1.29	3.8	2.1	3.3		
1959	1,091,500†	17.7	11.6	1.11	1.11	2.5	15.8	18.0	7.4	0.6	21.1	36.6	0.36	0.2	1.09	0.1	2.17	1.68*	3.78	1.34	3.5	1.9	3.7		
1960	1,093,160†	19.0	11.0	1.15	1.15	2.5	14.4	16.0	6.6	0.7	19.9	34.0	0.52	0.3	1.07	0.1	2.17	1.68*	4.0	1.63	3.4	2.1	3.6		
Average	1,093,160†	17.6	11.1	1.15	1.15	2.5	15.4	17.2	7.0	0.6	21.1	36.6	0.48	0.3	1.09	0.1	2.07	1.67*	3.60	1.63	3.4	2.1	3.6		
1961	1,110,290†	19.5	11.4	1.15	1.15	2.3	14.6	16.6	7.3	1.1	20.1	34.4	0.23	0.1	1.07	0.1	2.07	1.67*	3.33	1.33	3.7	2.2	4.2		
1962	1,115,080†	20.0	11.2	1.16	1.16	2.3	14.0	16.1	6.7	1.2	19.1	32.7	0.48	0.6	1.07	0.1	2.07	1.63*	3.40	1.33	3.4	1.8	4.3		
1963	1,115,630†	20.0	11.3	1.17	1.17	2.4	13.0	15.3	8.3	1.4	18.9	31.6	0.22	0.40	1.07	0.1	2.08	1.64*	3.89	1.64	3.4	1.8	4.3		
1964	1,106,040†	20.2	10.7	1.17	1.17	2.4	12.6	14.5	7.0	1.5	17.5	29.8	0.22	0.40	1.07	0.1	2.14	1.74*	3.93	1.52	3.4	1.8	4.3		
1965	1,102,660†	19.6	11.1	1.17	1.17	2.2	12.6	14.7	7.4	1.6	17.2	29.6	0.36	0.1	1.04	0.0	2.08	1.61*	3.86	1.35	3.5	2.4	4.5		
Average	1,102,660†	19.6	11.1	1.17	1.17	2.2	13.3	15.4	7.3	1.5	18.6	31.6	0.34	0.6	1.04	0.0	2.23	1.74*	3.86	1.35	3.3	2.3	4.4		
1966	1,102,570†	19.1	11.1	1.13	1.13	2.1	12.2	14.2	7.0	0.9	17.3	29.3	0.27	0.05	1.04	0.0	2.12	1.7*	3.9	1.5	3.5	2.1	4.4		
1967	1,101,990†	19.1	10.8	1.13	1.13	2.1	12.2	13.6	6.2	0.6	16.3	28.3	0.28	0.04	1.04	0.0	2.24	1.65*	3.77	1.56	3.1	2.1	4.6		
1968	1,074,940†	18.8	11.6	1.15	1.15	2.1	12.1	15.0	7.5	1.2	14.1	26.2	0.29	0.06	1.04	0.0	2.40	1.80*	3.72	1.21	2.9	2.1	4.6		
1969	1,086,400†	17.5	11.6	1.15	1.15	2.1	12.3	13.7	7.4	0.7	13.5	25.6	0.21	0.06	1.04	0.0	2.43	1.82*	3.95	1.56	3.0	1.8	4.6		
1970	1,084,180†	16.7	11.2	1.15	1.15	2.1	12.5	15.4	6.7	0.8	13.9	27.5	0.38	0.06	1.04	0.0	2.39	1.60*	3.90	1.86	3.0	1.7	4.6		
Average	1,084,180†	16.7	11.2	1.15	1.15	2.1	12.5	15.4	6.7	0.8	13.9	27.5	0.38	0.06	1.04	0.0	2.39	1.60*	3.90	1.86	3.0	1.7	4.6		
1971	1,013,420	16.7	11.5	1.15	1.15	2.9	11.0	12.9	7.5	0.6	14.0	24.9	0.17	0.01	0.02	0.01	2.50	1.71	4.0	1.16	1.58	0.7	4.2		

\*Exclusive of General Paralysis Registrar General's Estimate

††Up to 1956 was still births plus deaths in first four weeks per 1,000 live and still births. Beginning in 1956 only deaths in first week have been included



WARDS	Estimated Population	BIRTHS			TOTAL DEATHS			INFANT DEATHS	
		Number	Rate per 1,000 Population	Illegitimacy % of live births	Number	Rate per 1,000 Population	Number	Rate per 1,000 live births	
Aston ... ..	14,400	332	23.1	18.4	158	11.0	9	27.1	
Dertend ... ..	17,900	516	28.8	18.4	196	10.9	13	25.2	
Duddleston ...	18,000	406	22.6	20.7	182	10.1	9	22.2	
Ladywood ... ..	12,900	191	14.8	12.0	188	14.6	2	10.5	
Newtown ... ..	13,300	240	18.0	13.8	155	11.6	8	33.3	
Totals and Average Rates for Central Wards ...	76,500	1,685	22.0	17.6	879	11.5	41	24.3	
All Saints ... ..	12,500	364	29.1	17.0	211	16.9	13	35.7	
Edgbaston ... ..	27,800	437	15.7	15.2	287	10.3	7	22.0	
Gravelly Hill ...	25,000	668	24.1	15.8	400	16.0	34	50.0	
Handsworth ... ..	27,700	566	20.4	21.1	311	11.2	13	23.0	
Moseley ... ..	27,500	502	18.2	18.9	445	16.2	20	39.8	
Rotton Park ... ..	18,300	502	27.4	17.5	355	19.4	14	27.7	
Selly Oak ... ..	25,300	505	20.0	10.3	306	12.1	14	21.8	
Small Heath ... ..	26,300	367	14.0	6.3	362	13.8	8	32.5	
Soho ... ..	26,000	715	23.7	12.5	284	10.9	17	23.2	
Sparkbrook ... ..	23,700	734	28.6	15.1	237	9.2	13	19.7	
Sparkhill ... ..	23,700	659	27.8	15.6	260	11.0	10	15.4	
Washwood Heath ...	27,600	649	23.5	10.3	300	10.9	3	8.0	
Totals and Average Rates for Middle Ring Wards	320,000	6,803	21.3	14.6	4,048	12.6	180	26.5	
Acoccks Green ... ..	27,200	387	14.2	10.1	376	13.8	7	18.1	
Billesley ... ..	28,400	289	10.2	9.7	333	11.7	6	20.8	
Brandwood ... ..	35,600	533	15.0	6.9	361	10.1	10	18.8	
Erdington ... ..	40,000	668	16.7	6.7	384	9.6	5	7.5	
Fox Hollies ... ..	24,200	258	10.7	14.7	359	14.8	4	15.5	
Hall Green ... ..	28,400	324	11.4	4.9	348	12.3	1	3.1	
Harborne ... ..	24,600	282	11.5	6.7	347	14.1	7	24.8	
Kings Norton ... ..	22,800	212	9.3	31	286	12.5	3	14.2	
Kings Norton ... ..	31,400	533	16.6	3.5	386	12.0	8	15.0	
Longbridge ... ..	32,200	436	13.9	10.3	457	14.6	7	16.1	
Northfield ... ..	31,400	602	16.9	7.1	343	9.6	9	11.6	
Oscott ... ..	24,500	332	13.6	6.0	210	8.6	9	27.1	
Perry Barr ... ..	25,800	367	14.8	3.5	235	9.5	3	8.2	
Quinton ... ..	25,000	294	11.8	3.7	269	10.8	6	20.4	
Sandwell ... ..	29,000	459	15.8	6.3	285	9.8	6	13.1	
Shard End ... ..	36,800	547	14.9	7.1	333	9.0	12	21.9	
Sheldon ... ..	25,600	337	13.2	8.0	213	8.3	2	5.9	
Stechford ... ..	24,800	359	14.5	13.1	264	10.6	7	19.5	
Stockland Green ...	28,600	351	12.3	7.4	343	12.0	5	14.2	
Wesley ... ..	38,900	518	13.3	8.9	316	8.1	7	13.5	
Yardley ... ..	28,400	371	13.1	6.2	266	9.4	2	5.4	
Totals and Average Rates for Outer Ring Wards	616,900	8,459	13.7	8.2	6,714	10.9	124	14.7	
Ward of Donicle not known ... ..	—	3	—	—	4	—	—	—	
Total and Average Rates for Whole City	1,013,420	16,950	16.7	11.7	11,645	11.49	345	20.4	

# CAUSES OF DEATH AT DIFFERENT AGE PERIODS DURING 1971

[illegible]

## EPIDEMIOLOGY

### Diphtheria

Two cases of diphtheria arose during the year 1971. There was no record of either case having been immunised.

The first was a 14-year-old boy who on 20th/21st November got wet in the snow. On 23rd November he became feverish with loss of voice on 24th November. He was seen by his general practitioner on 26th November when a diagnosis of quinsy was made. On 30th November, 1971 he was admitted to the infectious diseases hospital; diphtheria organisms were grown from a large piece of membrane (mitis strain). Swabs were taken from the boy's family and also from his school contacts, all of which gave negative results. Parents of children at the school in question were made aware of the situation and immunisation was offered to all those children who had not received full protection.

On 9th December, 1971 a 19-year-old man was admitted to East Birmingham Hospital. He had been seen by his general practitioner with a somewhat suspicious throat. A swab was taken and diphtheric toxin-producing organisms were found—mitis strain. This young man had muscular dystrophy and was not at work. He was regarded as a mild case of diphtheria. Nose and throat swabs taken from the members of his family revealed three carriers—brothers aged 17, 13 and 9 years. All three were admitted to the infectious diseases hospital and the following is a chart of the information regarding this family.

			<i>Throat Swab</i>	<i>Schick Test</i>	<i>Treatment</i>
Patient, aged 19	..	..	+	+	A.D.S. 2,000 Units
Brother, aged 17	..	..	+	+	Diph/tet. Toxoid Penicillin
Brother, aged 13	..	..	+	+	Diph/Tet. Toxoid Erythromycin
Brother, aged 9	..	..	+	—	Erythromycin

The three diphtheria carriers had six consecutive nose and throat swabs before discharge.

There were five other young people in the family and all their throat swabs were negative. However, a brother aged 14 years had probably been in contact with the previous patient.

Because of the numerous children in the family of each of the cases it was necessary to extensively swab and schick test the 1,308 children in three schools, giving primary immunisation to 133 pupils and reinforcing doses to 222.

The following table shows the incidence of diphtheria in recent years:—

<i>Year</i>	<i>Cases</i>	<i>Deaths</i>	<i>Immunisation state</i>
1961	2	1	Never immunised.
1962	1	0	Mild case overdue for reinforcing injection.
1966	4*	1	The child who died had only had 3 injections and no booster dose.
			*No record of immunisation in one case. One had been immunised in infancy and the other had had three injections and was given a booster dose when the first case was notified.
1971	2	0	Never immunised.

No cases occurred during the years 1963, 1964, 1965, 1967, 1968, 1969 and 1970.

## Dysentery

During the year 679 notifications of dysentery were made to the Department; 112 by hospitals, 19 by the Public Health Laboratory Service and 526 by general practitioners. The reclassification of 22 of these left 657 cases recorded by the Department as confirmed clinically, bacteriologically or by both methods. For age and sex distribution, see page (47).

The seasonal incidence (with 1970 figures in brackets) was as follows:—

<i>1st Quarter</i>	<i>2nd Quarter</i>	<i>3rd Quarter</i>	<i>4th Quarter</i>
122 (55)	234 (95)	156 (147)	145 (84)



Faecal specimens were examined in 536 cases and in 109 (20·3 per cent) *Shigella* organisms were found. The distribution of the 109 bacteriologically confirmed cases was as follows:—

	<i>1st Quarter</i>	<i>2nd Quarter</i>	<i>3rd Quarter</i>	<i>4th Quarter</i>	<i>Totals</i>
<i>Shigella sonnei</i>	27	61	15	1	104
<i>Shigella flexneri</i>	1	1	0	2	4
<i>Shigella boydii</i>	0	1	0	0	1
TOTALS	28	63	15	3	109

Two institutional outbreaks came to our notice during the year, one at a day nursery and the other at an old people's home. In addition three primary day schools became involved in outbreaks in their own localities.

In January, at a day nursery, eight children and four members of the staff were affected. Faecal specimens were obtained from six of the affected children and all proved positive for *Shigella sonnei*; specimens from the four members of staff were all negative.

In May, the Public Health Laboratory reported *Shigella sonnei* in specimens from two residents at an old people's home. Enquiries showed that there had been a few cases of diarrhoea among the residents including the two known cases about a fortnight earlier but that the outbreak had subsided quickly when those affected were isolated.

Between the 3rd and 19th April children attending adjacent junior and infants schools were reported as suffering from diarrhoea. The extent of the outbreak is not recorded but it is known that at least 19 children were affected and specimens from four of them were positive for *Shigella sonnei*. In many cases, older and younger members of the household were also affected.

During a few days in May, upwards of 40 children and members of the staff of a primary school were affected with diarrhoea. Nine children and one teacher gave specimens which were positive for *Shigella sonnei*.

At the end of May and during the first few days of June, 21 children at an infants' school were recorded as having diarrhoea, six of whom had faecal specimens positive for *Shigella sonnei*.

In all these outbreaks, visits were made by members of the staff of the Department to the institutions involved as well as to the homes of non-residents and advice was given about personal and communal hygiene, exclusion, isolation and other measures relating to the control of the outbreak and the maintenance of good standards of hygiene. In no case was there any reason to think that food was specifically involved as a vehicle of spread.

## Encephalitis

### (a) INFECTIVE ENCEPHALITIS

In two patients a confirmed diagnosis of infective encephalitis (presumably of virus origin) was made and one died, a man aged 60.

The patient recovering was a 47-year-old woman.

### (b) POST INFECTIOUS ENCEPHALITIS

Post infectious encephalitis is usually a secondary attack upon the brain by the same organism as has already caused an illness such as mumps. During 1971 this occurred in two patients. Their ages and outcome were as follows:—

<i>Sex and Age</i>	<i>Initial Infection</i>	<i>Outcome</i>
Male, 30 years	Mumps	Recovered
Male, 58 years	Herpes	Died

## Food Poisoning and Salmonella Infection

The diagnosis of food poisoning during 1971 was accepted in 180 cases. These were distributed as follows:—

<i>1st Quarter</i>	<i>2nd Quarter</i>	<i>3rd Quarter</i>	<i>4th Quarter</i>
14 (18)	19 (56)	115 (63)	32 (35)

The figures in brackets refer to 1970.

The following is a summary of the outbreaks and single cases which occurred; an outbreak is defined as a situation where all the cases either probably or certainly derived from a single contamination or infecting source:—

<i>Outbreaks</i>	<i>Total Outbreaks</i>	<i>Total Cases</i>
	25	116

*Outbreaks due to identified agents*

Salmonella typhimurium	4 family .. .. .	15
Salmonella typhimurium 1a	1 family .. .. .	2
Salmonella virchow	1 family .. .. .	3
Salmonella heidelberg	1 family .. .. .	5
Salmonella agona	1 family .. .. .	2
Salmonella agona	1 group other than family ..	5
Staph. toxin	1 family .. .. .	3
Staph. toxin	2 groups other than family ..	48

<i>Outbreaks of undiscovered cause</i>	10 family .. .. .	26
--	-------------------	----

*Outbreaks not associated with food poisoning, i.e. not food borne*

Salmonella typhimurium	1 family .. .. .	2
Salmonella agona	1 family .. .. .	2
Salmonella panama	1 family .. .. .	3

*Single Cases*

Agents identified 59	Unknown 14	Total 73
----------------------	------------	----------

<i>Organism</i>	<i>No. of Cases</i>
Salmonella typhimurium	22
„ typhimurium 1a	2
„ typhimurium and blockley	1
„ lagos	1
„ enteritidis	9
„ gowdham	1
„ agona	7
„ shubra	1
„ meleagridis	1
„ hadar	3
„ stanley	1
„ munster	1
„ st. paul	2
bredeley	1
„ brandenberg	1
„ heidelberg	2
Staph. toxin	1
unknown	14

*Not associated with food*

Salmonella typhimurium	1
„ reading	1

## OUTBREAKS

116 cases were associated with 25 outbreaks.

*Salmonella typhimurium* was the causal organism isolated from four separate family outbreaks affecting fifteen persons. There was no connection between them.

Three members of one family were taken ill on 4th April, 1971 at 1600 hours. Frozen duckling was suspected. This was bought on 2nd April, put in the refrigerator and roasted on Sunday, 4th April and eaten for lunch. General cleanliness of the house was good.

*Salmonella typhimurium* was isolated from four of a family of six, all of whom had been taken ill from 8th-14th August whilst on a caravan holiday. One case was admitted to hospital. The family catered for themselves whilst at the caravan with just the odd meal taken out. No particular food was suspected and, as far as was known, no-one else on the caravan site was affected.

In regard to the third family from whom *Salmonella typhimurium* was isolated, the source of their infection was unknown. Food, however, was stored in a dirty larder and the hygiene and general cleanliness of the house was very poor.

Despite investigations the source of the infection was unknown in regard to three members of a family who were taken ill and from whom *Salmonella typhimurium* organisms were isolated.

*Salmonella typhimurium* 1a was the cause of illness affecting 2 members of a family; the origin of this infection was unknown.

*Salmonella heidelberg* was presumed to be the cause of a family outbreak affecting five persons who were taken ill with diarrhoea and vomiting. General cleanliness of house and kitchen was only fair and the investigation was hampered by lack of co-operation.

Deep frozen chicken which had not been given sufficient time for thawing was suspected in regard to three members of a family from whom *Salmonella virchow* organisms were isolated. The chicken apparently was only thawed for seven hours before being cooked and allowed to cool. This was eaten for a picnic lunch on 21st July, 1971. The three cases affected were taken ill on the 23rd and 24th July, their symptoms being diarrhoea, high temperature and dizziness. One case was a baby of one year old who was admitted to hospital. This was an exceptionally good house—hygiene excellent.



Twins aged 13 months were admitted to hospital after being taken ill with vomiting and diarrhoea, *Salmonella agona* organisms being isolated from specimens of faeces. The general cleanliness and hygienic conditions of the home were very poor and the parents could not remember any details of food eaten. Specimens taken from the parents gave negative results.

Staph. toxin was regarded as the cause of illness affecting three persons. The patients, all children, were taken ill on 25th January, 1971 approximately 4.5 hours after having partaken of a meal away from home which consisted of meat and onions. One case was admitted to hospital.

Forty-five persons were taken ill on Saturday, 24th July, 1971 2½ to 5 hours after a buffet-style meal arranged for a wedding reception. Most cases had vomiting, some diarrhoea and vomiting and abdominal pain. A plate was provided for each guest with a quarter of a chicken, ham, lettuce and tomatoes; in addition, available to the guests were slices of pork, sausage rolls, cheese, cocktail sausages and trifle. The chickens had been cooked on the previous evening (23rd July, 1971), cooled in covered dishes, then placed in the refrigerator. They were taken out of the refrigerator at 1030 hours on 24th July, carved together with ham and salad and arranged on the various individual plates for the buffet lunch. This was completed by 1130 hours and the meal eaten at approximately 1300 hours. The evening of the 23rd July was very hot and the rooms used for the preparation of the meal were unsatisfactory. The clinical features were typical of a Staph. toxin infection.

Staph. toxin was also regarded as the cause of illness affecting three persons who were taken ill on 26th November, approximately 2½ hours after partaking of beef curry. Two cases were admitted to hospital. Lunch had been arranged specially for these three people who were lecturing at a university and were the only three who ate the meal in question. Hygiene of the kitchen and staff was excellent and there had been no history of illness amongst the food handlers.

*Salmonella agona* was thought to be the causal organism in an outbreak affecting five persons, all of whom had partaken of a meal in a Chinese restaurant. The condition of the restaurant in question was most unsatisfactory and the premises were not up to the required standards. Of the five persons affected, three had partaken of chicken curry with fried rice, one had had pork curry with fried rice and the other king prawn, also with fried rice. *Salmonella agona* organisms were isolated from the faeces of the manager, who also helped in the kitchen, and from the chef.

The causal organism was, however, unknown in regard to 10 family outbreaks affecting 26 persons.

The following outbreaks were considered **not** to be food borne (person to person infection).

*Salmonella typhimurium* was isolated from a young mother and her 3-month-old baby. The mother could not recall any suspicious food which she had eaten. She was taken ill with diarrhoea and vomiting on 14th September, 1971, the baby being taken ill on 20th September, 1971.

Two cases of *Salmonella agona* occurred in a 22-year-old mother and her 8-day-old daughter. The baby was born in hospital on 19th October. The mother, however, had a history of a few days diarrhoea before being taken into hospital, and a stool specimen obtained from her on 23rd October showed that she was excreting *Salmonella agona* organisms. The baby on the 3rd day after birth, passed a loose stool and this grew *Salmonella agona*.

*Salmonella panama* was isolated from three young children, one aged 16 months and twins aged 6 months, who were taken ill on 8th October, 1971 with diarrhoea and vomiting, the twins being admitted to hospital. On investigation, both their mother and father were found to be symptomless excretors of *Salmonella panama*.

#### SINGLE CASES

*Salmonella typhimurium* and *Salmonella enteritidis* accounted for 22 and 9 respectively of the sporadic cases out of the 73 single cases which occurred during the year. 8 persons acquired their *Salmonella* infection abroad.

Food was not considered to be the source of infection in the following two single cases:—

- (1) A one-month-old Asian baby was admitted to hospital on 13th January, 1971 and found to be suffering from a *Salmonella* reading infection. Her mother was found to be a symptomless excretor of *Salmonella* reading.
- (2) A ten-month-old Asian baby boy was suffering from a *Salmonella typhimurium* infection—his mother and two sisters were found to be carriers of the same infection.

## Infective Jaundice

For the purpose of giving some indication of its extent and incidence, infective jaundice first became generally notifiable on 15th June, 1968. There was a slight decrease in the number of notifications during the year—201 as compared with 336 for 1970. It would, however, appear to be a fairly common condition. The following table shows the age and sex distribution.

Age	0—1	2—4	5—9	10—14	15—19	20—24	25—34	35—44	45—54	55—64	65—74	75+	Total
Males ..	—	6	28	16	10	11	17	2	8	3	—	2 (2 died)	103
Females ..	—	3	33	11	12	10	12	7	4 (1 died)	3 (1 died)	1	2 (1 died)	98
Grand Total Deaths													201 5

Most of the cases are due to infective hepatitis which has an incubation period of 15-50 days (commonly 28 days) and is usually transmitted by close association between persons.

During 1971 there were four deaths from this type:—

*Males:* 76 years and 86 years

*Females:* 57 years and 97 years

Notification also includes the less common so-called serum hepatitis, the incubation period of which is usually 60-160 days. Transmission is by injection and a history of blood transfusion, tattooing, injection or inoculation within the incubation period may suggest this diagnosis.

Two cases of serum hepatitis occurred during 1971, one of which died—a 54-year-old woman. Details and ages are set out below:—

*Male:* 42 years—following blood transfusions.

*Female:* 54 years—died—had been given a transfusion of 1 pint of blood about 2 months before she died. The donor of the one bottle of blood used for this transfusion had a positive report for Australia antigens and it would appear that this was most likely the source of infection.

## Leprosy

There were nineteen registered cases, all non-infectious, recorded as resident in the City at the beginning of the year.

During the year four of these cases were discovered to have left the City, two to their country of origin and two to other parts of the United Kingdom. In addition, one young man moved to another part of the United Kingdom but, having no permanent address there, is still regarded for record purposes as resident at his parents' address in Birmingham.

A man who had been under treatment at the hospital for Tropical Diseases, London for five years and resident in Birmingham for four years was brought to our attention by the Department of Health and Social Security. His condition is reported to be quiescent and non-infectious.

A fifteen-year-old boy recently arrived in the United Kingdom was notified as a case of tuberculoid leprosy. His condition was considered to be active and minimally infectious. He was suitable for home treatment but was not permitted to start school for a term until treatment was well established and his lesions less obvious.

A man, recently arrived from the United States of America to stay with relatives in Birmingham, was notified as a case of acute lepromatous leprosy. He was transferred to a hospital in Oxford for treatment but, for record purposes, is regarded as resident in Birmingham.

A man who had come from overseas to Cardiff during 1971, and came to live with friends in Birmingham towards the end of the year, was notified as a case of dimorphous leprosy. He was transferred from East Birmingham Hospital to a hospital in Oxford for treatment. For record purposes he is regarded as resident in Birmingham.

There were, therefore, nineteen cases recorded as resident in Birmingham at the end of the year. Sixteen cases were actually resident in the City. Three were living away; one non-infectious case at a temporary address elsewhere and two infectious cases in hospital.

Where it was considered advisable by the clinician in charge, members of the household with whom a case resided were examined periodically. No significant findings were recorded as a result of these examinations.



## Leptospirosis

Leptospirosis became a notifiable disease as from 1st October, 1968 under the Public Health Infectious Diseases Regulations, 1968.

During the year 1971 no cases were notified.

## Malaria

During the year 1971 there were 12 confirmed cases of malaria, all having acquired their infection abroad. Details of ages and sex are as follows:—

*Males:* 18 years, 18 years, 20 years, 21 years, 23 years, 24 years, 25 years, 28 years, 31 years, 44 years.

*Females:* 20 years, 21 years.

## Measles

There was a decrease in the number of notifications of measles for 1971—3,206 as compared with 6,817 cases for 1970—but there were only 2,099 notified during 1969. 1954, however, still remains the year with the lowest number recorded since 1940, i.e. 456 cases. The following table shows the age and sex distribution:—

Age	0	1—2	3—4	5—9	10—14	15—19	20—24	25—34	35—44	45—54	55—64	65—74	75+	Total
Males	94	446	444	606	42	13	2	—	—	—	—	—	—	1,647
Females	97	389	405	608	37	7	11	4	1	—	—	—	—	1,559

The highest number of notifications recorded was received during the week ending 12th March (411). The week ending 3rd September had the lowest number (3).

## DEATHS

There was one death—details as follows:—

Male aged 11 months died on 25th February, 1972 from acute bronchopneumonia complicating measles.

## Acute Meningitis

Under the Public Health Infectious Diseases Regulations, 1968, all forms of acute meningitis became notifiable. During the year 1971, 77 cases were notified, 6 of whom died. The following table shows the sex, age and type of meningitis:—

<i>Type of Meningitis</i>	<i>Sex</i>	0—	1—2	3—4	5—9	10—14	15—19	20—24	25—34	35—44	45+	<i>Totals</i>
VIRAL Mumps	Males	—	—	—	—	—	—	—	—	—	—	—
	Females	—	—	—	2	—	—	—	—	—	—	2
Virus not identified	Males	1	—	—	8	5	2	—	4	—	1	21
	Females	1 (died)	1	2	1	3	4	2	10	—	1	25
BACTERIAL Meningococcal	Males	2	4 (1 died)	1	—	—	—	—	—	—	—	7
	Females	3 (2 died)	3 (1 died)	1	—	2	—	—	—	—	1	10
Pneumococcal	Males	—	—	1	—	—	—	—	—	—	1	2
	Females	—	—	—	—	—	—	—	—	—	1	1
Haemophilus influenzae	Males	1	1	1	—	—	—	—	—	—	—	3
	Females	—	—	—	—	—	—	—	—	—	—	—
Other bacteria	Males	—	1	—	—	—	1	—	—	—	2	4
	Females	—	—	—	—	—	(died)	—	—	—	1	1
Organism not Identified	Males	—	—	—	—	—	—	—	—	—	—	—
	Females	—	—	1	—	—	—	—	—	—	—	1
TOTAL CASES										77	TOTAL DEATHS	6

## Paratyphoid Fever

1971 was notable for the absence of any cases of paratyphoid fever. The following table shows the incidence in recent years.

<i>Year</i>	<i>Cases</i>
1965	1
1966	5
1967	4
1968	2
1969	0
1970	0
1971	0



## Poliomyelitis

No cases of poliomyelitis occurred during 1971. The following sets out the numbers of confirmed cases which have been recorded since 1955.

1956	1957	1958	1959	1960	1961	1962	1963-67	1968	1969	1970	1971
7	35	43	9	22	18	5	nil	5	1	nil	nil

## Psittacosis

During the year 1971 there were three cases of psittacosis.

The firsts was a 63-year-old man who was the manager of a pet shop engaged in acquiring birds and animals for zoos. He was admitted from the outpatient department to hospital on 27th January for further investigation of an unexplained fever. His present illness had apparently started ten days previously with anorexia, malaise, sweating and rigors. There was a previous history of similar episodes on each occasion associated with the importation of tropical birds. Psittacosis antibodies were present in a specimen of blood taken shortly after admission to a titre of 1 : 256. Treatment was commenced with erythromycin. There was a fall in temperature and clinical improvement, and the patient was discharged home on 3rd February. He was seen again on 10th February when he had no complaints and a chest x-ray showed satisfactory resolution of the pneumonia which, in retrospect, was probably due to psittacosis. Previous to this illness he had had bouts of pyrexia and rigors, and prior to his illness on 27th January he had handled two birds that had died.

On 10th March, 1971 a 35-year-old man was admitted to hospital following a sharp attack of diarrhoea. For a day after admission he continued to have diarrhoea, the stools being watery and blood-stained. There was evidence of improvement in his condition when he took his own discharge on 12th March, 1971. In the meantime an investigation was carried out at his home, when it was found that a 24-year-old girl had been taken ill with similar symptoms on 3rd March and was admitted to hospital on 11th March, 1971. From the investigation it appeared quite likely that the girl had a psittacosis infection—complement fixation test had a titre of 1 : 2,048.

Specimens of blood taken from the 35-year-old man gave the following results:—

8.4.71	..	..	..	Psittacosis group 1 : 512
28.4.71	..	..	..	Psittacosis group 1 : 256

During the course of our enquiries it was found that the patients had both had contact with birds over the past 12 months when buying cat food from a pet shop. The shop in question was visited and specimens of blood taken from the owner and his assistant gave negative results. He did, however, have a white cockatoo which apparently died accidentally and which was not caged and used to fly loose around the shop.

## Scabies

The number of cases treated at local authority clinics was fewer than in the previous year. Nevertheless, scabies continues to be very prevalent and for the benefit of those who found it difficult to attend for treatment during the daytime, sessions were held on two evenings per week at Mowbray Street School Clinic where facilities already exist for the treatment of school children. The first session was held on 6th December.

Visits were paid by the staff of Bacchus Road Centre to two premises for the treatment of residents: at a Social Services Department home for the elderly, 200 men were treated, and at a private hotel which caters in the main for mentally handicapped people, nine men and 32 women were treated. These figures are not included in the tables below.

<i>Year</i>	<i>Treated at Bacchus Road Centre</i>	<i>Treated at School Clinics</i>	<i>Treated at Mowbray Street Evening Sessions</i>	<i>Total</i>
1967	4,112	686		4,798
1968	4,725	1,106		5,831
1969	5,104	1,713		6,817
1970	5,001	1,447		6,448
1971	3,949	1,318	47	5,314

## Scarlet Fever

During the year 211 confirmed cases of scarlet fever were notified as compared with 255, 346, 285, 560, 544 for 1970, 1969, 1968, 1967 and 1966 respectively. The age group 5-9 years accounted for 53.55 per cent of the cases. The highest number of notifications (15) was received in the week ending 12th March, 1971. There were no deaths.

## **Smallpox**

No cases of smallpox occurred in the City during the year 1971. Surveillance was, however, carried out on a number of people who had arrived from endemic areas.

## **Tetanus**

As from 1st October, 1968 tetanus became notifiable. One case occurred during the year 1971 in a 19-year-old male who was admitted to hospital on 15th September, 1971 and diagnosed as a case of tetanus, his onset being 11th September, 1971. He was of Asian origin and had been in England for five years, working as a labourer in a factory. In September 1971 he stated he cut the index finger of his left hand whilst at work (in fact he appeared to cut his left hand frequently).

## **Typhoid**

Two cases of typhoid fever occurred during the year 1971—both recovered. The age and sex distribution was as follows:—

Male: 2 years

Female: 29 years

The first case was a 29-year-old European woman who was transferred to the infectious diseases hospital from the maternity hospital on 6th July, 1971 suffering from typhoid fever—(phage type degraded Vi strain)—complicating pregnancy and probably contracted in Portugal. Shortly after her return from holiday she developed symptoms suggestive of urinary tract infection which had responded to a short course of ampicillin. Two weeks later, however, the symptoms returned with greater severity and were accompanied by high fever and rigors. She was admitted to the maternity hospital, where *Salmonella typhi* was cultured from her blood and treatment started with oral ampicillin. At the time of her transfer to the infectious diseases hospital she was moderately ill. Treatment was continued with ampicillin for a total of 14 days, but cultures of urine and stool taken after the courses of treatment were persistently positive for *Salmonella typhi*, and two weeks after stopping ampicillin there was a recurrence of symptoms and *Salmonella typhi* was again cultured from the patient's blood. Ampicillin was re-started with rapid relief of symptoms and sterilisation of blood, urine and stool.

On 22nd August, 1971 a 2-year-old Asian boy was admitted to the infectious diseases hospital with a pyrexia—a diagnosis of typhoid fever was made on positive stool and blood cultures (Phage type D.1). The boy had been on holiday with his parents in India on 7th July, 1971, returning to England on 27th July, 1971. His onset of illness was approximately 10th August, 1971. It was, therefore, assumed that he had acquired his infection abroad. On 3rd and 24th June, 1971 he had T.A.B. vaccination.

No other cases arose.

## Whooping Cough

During 1971 there was a decrease in the number of notifications of whooping cough—458 as compared with 768 for 1970. The notifications reached their peak in the week ending 19th March when 47 were received. Three children died from whooping cough, details as follows:—

Male aged 2 years, died 19.2.71. This baby died from: Ia. Pneumonia, Ib. Whooping Cough, II. Downs Syndrome. Conditions at the home were good. There were two other children in the house, one of whom had recently had whooping cough. The baby was admitted to hospital approximately 2 weeks before death, his onset being late December 70/January 71—a diagnosis of whooping cough was made at the end of January 1971. The other sibling also developed whooping cough and was admitted to hospital at the same time as the baby who died.

Male aged 2 months, died 24.4.71. This baby lived with his parents and two siblings (boy aged 6 and girl aged 4) in an older-type terraced house. The parents were owner-occupiers and the cleanliness of the house was good. The baby's 4-year-old sister had had whooping cough (onset approx. 27th March) and she had not been isolated. The baby was a premature baby (4 lb. 13 oz. at birth). His cough commenced approx. 3rd April, 1971 followed by sickness and diarrhoea. He collapsed on 20th April and was admitted to hospital. The baby died from Ia. Cerebral venous thrombosis, Ib. Dehydration, Ic. Gastroenteritis, II Whooping cough.

Male aged 4 months, died 2.6.71. This was a premature baby born in South Africa. The family had recently returned from South Africa and were staying temporarily with their in-laws in a self-owned modern detached house. The baby's family consisted of parents and two girls aged 11 years and 3 years. The baby was admitted to hospital on 30th April, 1971 and died from Ia. Bronchopneumonia, Ib. Pertussis. His two sisters also developed whooping cough.

## Yellow Fever

Yellow fever became notifiable under the Public Health Infectious Diseases Regulations, 1968. During the year 1971 there were no cases notified.



## Public Health Aircraft Regulations

Health control of 2,052 aircraft arriving at Birmingham Airport from outside the "excepted area" was carried out uneventfully during 1971, with the exception of one aircraft which was detained for health purposes. An American passenger on a flight from Kingston, Jamaica via Bermuda was detained on 20th August, 1971—the passenger suffering from partial paralysis.

A further 252 aircraft arrived in addition at Birmingham Airport from outside the "excepted area," having first called at another United Kingdom airport.

## Arrival of Immigrants

As in previous years, notification of the arrival of immigrants proceeding to Birmingham came largely through London Airport, where in most cases a chest x-ray was carried out. During 1971, however, 179 West Indians arrived at Birmingham Airport on the V.C.10 flight coming via New York, 100 of whom proceeded to addresses outside the City.

During 1971 2,665 advice notes were received concerning the arrival of immigrants coming to Birmingham, and 2,115 were successfully contacted.

The following table shows the trend in the number of notifications received from ports and airports in respect of long stay immigrants whose stated destination was Birmingham.

				<i>Year</i>						
				<i>1965</i>	<i>1966</i>	<i>1967</i>	<i>1968</i>	<i>1969</i>	<i>1970</i>	<i>1971</i>
<i>(a) Commonwealth</i>										
Caribbean	..	..		1,029	760	1,045	680	593	477	305
India	..	..	..	208	294	397	1,292	806	602	576
Pakistan	..	..		255	234	290	961	1,806	1,747	1,116
Other Asian	..	..		45	65	87	106	92	116	124
African	..	..		43	56	62	265	305	366	420
Other	..	..	..	30	19	15	12	16	37	19
Sub-Total	..	..		1,610	1,428	1,896	3,316	3,618	3,345	2,560
<i>(b) Non-Commonwealth</i>										
European	..	..		117	41	32	34	26	25	21
Other	..	..	..	14	12	22	22	19	55	84
Total	..	..		1,741	1,481	1,950	3,372	3,663	3,425	2,665

Immigrant children under the age of five years are referred to the Personal and Child Health Services and the Immunisation Section for any follow-up action which may be required. Children of school age are requested to report as soon as possible to a Registration Centre for admittance to school, and a full medical examination and check upon the immunisation state is an important part of the arrangements. During 1971 there were 1,363 arrivals and 1,463 medical examinations.

### **Conditional Entry**

The immigration authorities at the port of entry can authorise conditional entry for medical reasons provided that within a certain number of days the immigrant reports direct to the Medical Officer of Health in whose area he or she is residing and attends for any subsequent examination or treatment which may be required.

During 1971, twenty-six such immigrants were admitted conditionally: the x-rays of twenty-two were suggestive of tuberculosis and the remaining four had an eye defect.



# INFECTIOUS DISEASES 1971

## CONFIRMED CASES

### AGES

	Sex	0	1-2	3-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75 up	Totals	
Acute Meningitis ...	M F	4 4	6 4	3 4	8 3	5 5	3 4	— 2	4 10	— —	4 —	— 2	— 1	— 1	37 40	77
Anthrax ...	M F	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	Nil
Diphtheria ...	M F	— —	— —	— —	— —	1 —	1 —	— —	— —	— —	— —	— —	— —	— —	2 —	2
Dysentery ...	M F	28 26	75 72	40 30	52 55	15 16	11 15	14 29	19 33	14 23	17 20	17 13	4 6	2 11	308 349	657
Encephalitis Acute Infective ...	M F	— —	— —	— —	— —	— —	— —	— —	— —	— —	— 1	1 —	— —	— —	1 1	2
Encephalitis Post Infectious ...	M F	— —	— —	— —	— —	— —	— —	— —	1 —	— —	— 1	— —	— —	— —	2 —	2
Food Poisoning ...	M F	8 10	8 7	4 4	5 9	6 7	1 7	9 15	25 28	2 5	7 4	1 8	2 3	1 3	79 110	189
Infective Jaundice	M F	— —	— —	6 3	28 33	16 11	10 12	11 10	17 12	2 7	8 4	3 3	— 1	2 2	103 98	201
Leprosy ...	M F	— —	— —	— —	— —	— —	1 —	— —	3 —	— —	— —	— —	— —	— —	4 —	4
Leptospirosis ...	M F	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	Nil
Malaria ...	M F	— —	— —	— —	— —	— —	2 —	4 2	3 —	1 —	— —	— —	— —	— —	10 2	12
Measles ...	M F	94 97	446 389	444 405	606 608	42 37	13 7	2 11	— 4	— 1	— —	— —	— —	— —	1647 1559	3206
Ophthalmia Neonatorum ...	M F	60 56	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	60 56	116
Paratyphoid Fever ...	M F	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	Nil
Poliomyelitis Paralytic ...	M F	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	Nil
Poliomyelitis Non-Paralytic ...	M F	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	Nil
Scarlet Fever ...	M F	3 —	7 5	19 14	62 51	16 14	5 7	2 1	3 1	1 —	— —	— —	— —	— —	118 93	211
Smallpox ...	M F	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	Nil
Tetanus ...	M F	— —	— —	— —	— —	— —	1 —	— —	— —	— —	— —	— —	— —	— —	1 —	1
Typhoid Fever ...	M F	— —	1 —	— —	— —	— —	— —	— —	— 1	— —	— —	— —	— —	— —	1 1	2
Whooping Cough ...	M F	20 39	72 53	50 49	81 76	6 5	2 3	1 —	— 1	— —	— —	— —	— —	— —	232 226	458
Yellow Fever ...	M F	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	Nil

# IMMUNISATION

## Sections 26 and 28 National Health Service Act, 1946

The following figures, extracted from the detailed tables at the end of this chapter of the Report, show some of the main trends in immunisation during the year.

	1971	1970
Children who completed primary immunisation against diphtheria .. .. .	18,269	18,162
Children who completed primary immunisation against poliomyelitis .. .. .	17,016	18,399
Children who received reinforcing immunisation against diphtheria .. .. .	12,101	14,338
Children who received reinforcing immunisation against poliomyelitis .. .. .	11,799	13,674

Because of the occurrence of diphtheria in the City, immunisation was carried out at one secondary and two primary schools.

At the secondary school, because of the age of the boys, it was necessary to offer preliminary Schick tests. Those who were Schick positive proceeded to diphtheria immunisation, either a primary course or a reinforcing dose as indicated by the immunisation records in our possession.

Number of pupils on register .. .. .	261
Number of pupils Schick tested .. .. .	240
Schick positives beginning a primary course .. .. .	34
Schick positives receiving a reinforcing dose .. .. .	18

At the two primary schools, parents were invited by letter to consent to immunisation if their children had not received a full primary course plus a reinforcing dose. The records of those who consented were checked and the children were immunised as required.

### *School No. 1*

Number of pupils on register .. .. .	523
Number of pupils beginning a primary course .. .. .	43
Number of pupils receiving a reinforcing dose .. .. .	118

### *School No. 2*

Number of pupils on register .. .. .	524
Number of pupils beginning a primary course .. .. .	49
Number of pupils receiving a reinforcing dose .. .. .	86

These figures show that, in these two schools, 296 children out of 1,047 (or over 28 per cent) were admitted by their parents to be unimmunised or incompletely immunised. Reference has been made in the Reports in previous years to parents' neglect to ensure that their children are fully immunised in infancy and receive reinforcing doses when they fall due. Although diphtheria is now rare, its occurrence from time to time must be expected. Its spread on such occasions can be prevented only by maintaining a high level of immunisation. Fortunately, on this occasion, spread was very limited but fears for the future must remain unless all parents take their responsibilities seriously and ensure that their children are fully immunised.

Early in 1971 we were approached by a psychiatric hospital in the City because they had been advised by the Department of Health and Social Security of a death from diphtheria in a similar hospital in another part of the country. Schick testing and Immunisation was carried out as required.

Number of patients and staff Schick tested .. .. .	813
Schick positives beginning a primary course .. .. .	275
Schick positives receiving a reinforcing dose .. .. .	nil

It was also considered that those attending senior and former junior training centres might also be at risk from diphtheria; permissions were sought from parents for Schick tests and immunisation, as necessary, to be given by the Department in the centres early in 1972.

## VACCINATION AGAINST RUBELLA

The rubella vaccination scheme for girls between their 11th and 14th birthdays was continued. Since the commencement of the school year in September, 1971, vaccination has been offered to girls in their 2nd year in secondary school by the Department. Since April, 1971, the vaccine has been purchased by the Public Health Department.

It was also decided to extend the scheme to include unmarried teachers, student teachers and day nursery staff employed by the Corporation because they are at special risk. A blood sample was taken in the first instance to ascertain whether or not they had a natural immunity. Clinics were held out of normal working hours.

Girls vaccinated by the Pubic Health Department... ..	11,830
Girls vaccinated by general practitioners .. .. .	121
Women and girls of other ages vaccinated by general practitioners ..	31

*Unmarried teachers, student teachers, day nursery staff*

Blood samples taken	..	..	..	..	..	..	..	..	593
Negative	..	..	..	..	..	..	..	..	68
Vaccinated	..	..	..	..	..	..	..	..	62
Failed vaccination appointment	..	..	..	..	..	..	..	..	6

## B.C.G. VACCINATION

### School Children (13 years old)

During the year 10,110 children had B.C.G. vaccination in schools, as compared with 11,608 in 1970.

The parents of 12,212 children were approached and of these 11,566 (94.7 per cent) accepted the skin test and vaccination with B.C.G.

During the period 12,305 were skin tested. Of these, 804 had been previously vaccinated either at contact clinics or by special request in this City or elsewhere.

**Table 1 . Children not previously vaccinated**

Skin tests performed	..	..	..	..	..	..	..	11,501
Positive..	..	..	..	..	..	..	..	711
Doubtful	..	..	..	..	..	..	..	1
Failed to attend for reading of test	..	..	..	..	..	..	..	648
Negative	..	..	..	..	..	..	..	10,141
Vaccinated with B.C.G.	..	..	..	..	..	..	..	10,110

Thirty-one children who gave a negative reaction to skin test were not vaccinated for various reasons, swimming, illness, etc. A number of these were later re-tested and vaccinated.

The percentage of positive reactors amongst those not previously vaccinated was slightly higher than in 1970.

1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
7.5%	8.1%	10.4%	8.8%	10.6%	6.9%	11.4%	9.0%	5.8%	6.5%

**Table 2 – Children who had previously been vaccinated**

Skin tests performed	..	..	..	..	..	..	..	804
Positive..	..	..	..	..	..	..	..	801
Doubtful	..	..	..	..	..	..	..	—
Failed to attend for reading of test	..	..	..	..	..	..	..	1
Negative	..	..	..	..	..	..	..	2

(re-vacc: 2)



A sample of children from each school vaccinated with B.C.G. during the previous year, was given a skin test:—

Conversion tests performed	..	..	..	..	..	720
Tests read	..	..	..	..	..	664
Converted	..	..	..	..	..	645 (97.14%)
Negative	..	..	..	..	..	19
						(re-vacc:) 1
Doubtful	..	..	..	..	..	—
Failed to attend for reading of test	..	..	..	..	..	56

### Children X-rayed during 1971

Of the 12,305 initially skin tested, 1,512 were found to give a positive reaction (801 who had been previously vaccinated and 711 who had not).

All were offered X-ray during 1971.

Also 101 children who were found to give a positive reaction in 1970 were X-rayed in 1971.

X-ray appointments offered	..	..	..	..	..	..	1,613
Failed to attend	..	..	..	..	..	..	66
X-rayed during preceding 12 months	..	..	..	..	..	..	9
Abnormal	..	..	..	..	..	..	21
Normal	..	..	..	..	..	..	1,517

In previous years it has been the practice to offer appointments for X-ray to children whose parents refused skin testing or vaccination, and those for whom permission cards were signed but who were absent from school when the Medical Officer visited and failed to keep a subsequent appointment at the central clinic. Because of the large proportion who failed to keep these X-ray appointments and particularly because of the very small yield of significantly abnormal findings from those who were X-rayed, this practice was discontinued on 31st May, 1971.

The following tables refer only to the period up to the end of May:—

X-ray appointments offered to children whose parents refused skin testing or vaccination								236
Failed to attend	..	..	..	..	..	..	..	80
X-rayed during preceding 12 months	..	..	..	..	..	..	..	2
Abnormal	..	..	..	..	..	..	..	1
Normal	..	..	..	..	..	..	..	153
X-ray appointments offered to children for whom permission cards were signed and who were not seen at school or central clinic								425
Failed to attend	..	..	..	..	..	..	..	229
X-rayed during preceding 12 months	..	..	..	..	..	..	..	—
Abnormal	..	..	..	..	..	..	..	3
Normal	..	..	..	..	..	..	..	193

Appointments for X-rays were offered to children for whom vaccination with B.C.G. was inadvisable.

X-ray appointments offered	..	..	..	..	..	..	19
Failed to attend	..	..	..	..	..	..	6
X-rayed during preceding 12 months	..	..	..	..	..	..	2
Abnormal	..	..	..	..	..	..	—
Normal	..	..	..	..	..	..	11

## Colleges of Further Education

Following the pilot scheme carried out in Bournville College of Further Education last year, it was decided to offer vaccination against tuberculosis to all full time students registering at colleges of further education for the first time in September, 1971.

### Students not previously vaccinated

Skin tests performed	..	..	..	..	..	..	15
Negative	..	..	..	..	..	..	15
Vaccinated with B.C.G.	..	..	..	..	..	..	15

### Students who had been previously vaccinated

Skin tests performed	..	..	..	..	..	..	18
Positive	..	..	..	..	..	..	18

Ten students were offered X-ray appointments; all were normal.

## Tuberculosis arising in Educational Establishments

Three cases of tuberculosis occurred in two City schools and one college of further education. Many of the contacts had been through the routine B.C.G. vaccination procedure a short time previously. Special visits were, however, made to the institutions concerned and to one school in which a case occurred at the end of 1970, to deal with those children and students who had not been covered by the routine visits.

### Children and Students who had not been previously vaccinated

Skin tests performed	..	..	..	..	..	..	40
Positive	..	..	..	..	..	..	9
Negative	..	..	..	..	..	..	28
Failed to attend for reading of test	..	..	..	..	..	..	3
Vaccinated with B.C.G.	..	..	..	..	..	..	28



## Children and Students who had been previously vaccinated

Skin tests performed	..	..	..	..	..	..	..	16
Positive..	..	..	..	..	..	..	..	16
Negative	..	..	..	..	..	..	..	—

X-ray was offered to those giving a positive tuberculin reaction, those for whom tuberculin testing was unnecessary or inadvisable, those who failed two appointments for tuberculin testing or vaccination and those who refused tuberculin testing.

## Children and Students

Appointments offered	..	..	..	..	..	..	..	119
Failed to attend	..	..	..	..	..	..	..	12
Normal ..	..	..	..	..	..	..	..	106
Abnormal	..	..	..	..	..	..	..	1

## Staff

Appointments offered	..	..	..	..	..	..	..	54
Failed to attend	..	..	..	..	..	..	..	4
X-rayed during preceding 12 months	..	..	..	..	..	..	..	—
Normal ..	..	..	..	..	..	..	..	49
Abnormal	..	..	..	..	..	..	..	1

## Notifications in 1971 of tuberculosis in persons aged 13-30 years previously tuberculin tested or vaccinated with B.C.G.

One who was	tuberculin positive in 1954
One who was	„ „ „ 1955
One who was	„ „ „ 1961
One who was	„ „ „ 1964
Two who were	„ „ „ 1965
One who was	„ „ „ 1966
Four who were	„ „ „ 1967
One who was	„ „ „ 1968
Four who were	„ „ „ 1969
Five who were	„ „ „ 1970
One who was	„ „ „ 1971

One who was vaccinated with B.C.G. in	1955
Three who were	„ „ „ „ 1958
Two who were	„ „ „ „ 1961
One who was	„ „ „ „ 1967
One who was	„ „ „ „ 1968
One who was	„ „ „ „ 1969
One who was	„ „ „ „ 1971

One who was tuberculin negative at Canterbury House in 1969 but failed to attend the Public Health Department.

One who failed to attend for reading of test in 1971 was given and accepted an appointment for chest X-ray.

### Three year follow up by X-ray of strongly tuberculin positive children

As there were only 128 appointments to be offered, and because the attendance is so poor the number did not warrant a special X-ray session being arranged—they will be given appointments early in 1972 together with those due for follow up in that year.

#### Contacts, Hospital Staff and Public Health Staff

Skin tests performed	..	..	..	..	..	..	..	1,408
Positive..	..	..	..	..	..	..	..	132
Doubtful	..	..	..	..	..	..	..	—
Failed to attend for reading of test				..	..	..	..	71
Negative	..	..	..	..	..	..	..	1,205
Vaccinated with B.C.G.	..	..	..	..	..	..	..	1,197

Eight negative reactors were not vaccinated for various reasons.

When necessary, two appointments for skin testing were offered; 190 persons failed both appointments.

Twenty-six babies from maternity hospitals were vaccinated without preliminary skin test; in addition 96 babies were vaccinated at the hospitals.

Conversion tests are carried out on this group who are at greater risk than the normal population.

Conversion tests performed	..	..	..	..	..	..	..	1,198
Converted	..	..	..	..	..	..	..	1,015
Negative	..	..	..	..	..	..	..	111
								(re-vac: 37)
Doubtful	..	..	..	..	..	..	..	3
Failed to attend for reading of test				..	..	..	..	69

### Children of Immigrant Families

B.C.G. vaccination was again made available to babies and children of immigrant (mainly Asian) parents as being persons at special risk.

Skin tests performed	..	..	..	..	..	..	..	2,386
Positive..	..	..	..	..	..	..	..	11
Doubtful	..	..	..	..	..	..	..	1
Failed to attend for reading of test				..	..	..	..	200
Negative	..	..	..	..	..	..	..	2,174
Vaccinated with B.C.G.	..	..	..	..	..	..	..	2,166

Conversion tests were carried out on this group:—

Conversion tests performed	..	..	..	..	..	..	..	1,674
Positive..	..	..	..	..	..	..	..	1,394
Doubtful	..	..	..	..	..	..	..	3
Negative	..	..	..	..	..	..	..	160
							(re-vacc. 30)	
Failed to attend for reading test	..	..	..	..	..	..	..	117

The examination of immigrant children prior to school entry continued as in previous years. The examination includes a Heaf test; grade two, three and four Heaf positives are referred to the Chest Clinic and negatives and grade one positives are referred to the Immunisation Section for further examination.

Skin tests performed by Immunisation Section..	..	..	..	..	..	..	..	1,242
Positive..	..	..	..	..	..	..	..	433
Doubtful	..	..	..	..	..	..	..	—
Failed to attend for reading of test ..	..	..	..	..	..	..	..	67
Negative	..	..	..	..	..	..	..	742
Vaccinated with B.C.G.	..	..	..	..	..	..	..	738

This group includes a substantial number of children apparently already vaccinated with B.C.G. although an accurate history is not always obtainable.

X-ray appointments were offered to those who gave a more strongly positive tuberculin reaction than they had done at the school clinic a few months previously.

Appointments offered	..	..	..	..	..	..	..	283
Normal ..	..	..	..	..	..	..	..	234
Abnormal	..	..	..	..	..	..	..	14
Failed to attend	..	..	..	..	..	..	..	35

Children below school age notified by the immigration authorities as newly arrived in the United Kingdom were called to the B.C.G. Section for examination.

Skin tests performed	..	..	..	..	..	..	..	55
Positive..	..	..	..	..	..	..	..	4
Doubtful	..	..	..	..	..	..	..	—
Failed to attend for reading of test ..	..	..	..	..	..	..	..	7
Negative	..	..	..	..	..	..	..	44
Vaccinated with B.C.G.	..	..	..	..	..	..	..	44

Conversion tests were carried out on this group:

Conversion tests performed	..	..	..	..	..	..	37
Positive	..	..	..	..	..	..	33
Negative	..	..	..	..	..	..	1
						(re-vac. 1)	
Failed to attend for reading of test	..	..	..	..	..	..	3

It will be noted that among contacts, etc., of 1,129 conversion tests read 111 (9·8 per cent) were negative, and that among Asian babies, etc., of 1,557 conversion tests read 160 (10·3 per cent) were negative. Many of the contacts who failed to convert were in fact babies and young children of Asian parentage. The reason for this failure to convert is not certain. B.C.G. scar size seems to be similar among those who become tuberculin positive and those who remain negative. Some of these children are slow to convert, becoming tuberculin positive after six months but not after three. Others remain negative even after six months or longer.

## Visitors

Sixteen visits were paid to the Section by doctors and nurses of other authorities and countries for the purpose of observing the B.C.G. clinics.

## VACCINATION AGAINST SMALLPOX

As from 1st December, 1971, the Secretary of State accepted the advice of the Joint Committee on Vaccination and Immunisation that vaccination against smallpox need no longer be recommended as a routine procedure in early childhood. Vaccination continues to be recommended for travellers to and from countries where smallpox is endemic or where eradication programmes are in progress, and for Health Service staff who may come into contact with patients.

Records were received of the following vaccinations by general practitioners of children in the City under the age of 16 years for the period 1st January to 30th November, 1971, inclusive.

Successful primary vaccinations	..	..	..	..	..	..	4,775
Re-vaccinations	..	..	..	..	..	..	626

In addition there were 344 persons vaccinated by the Staff of the Department. All these, with the exception of sixteen were re-vaccinations.

The total number of known smallpox vaccinations in the City, by age group, is as follows:—

<i>Age at date of vaccination</i>	<i>Under 1 year</i>	<i>1 year</i>	<i>2 - 4 years</i>	<i>5 - 15 years</i>	<i>16 years and over</i>
Primary Vaccinations	272	2,510	1,586	412	11
Re-vaccinations	—	20	142	465	327

## Reactions

There was one case of generalised vaccinia—a 49-year-old woman who was re-vaccinated on 23rd July, 1971, prior to travelling abroad.

## YELLOW FEVER VACCINATION

As in previous years yellow fever vaccination clinics were held on Wednesdays between 1400 and 1500 hours. Appointments are not necessary for these clinics. An International Certificate is issued at the time of vaccination and a charge is made.

During the year 2,415 persons were vaccinated against yellow fever. Of these, 862 attended from addresses within the City and 1,553 from outside. Vaccination was performed at times other than the normal clinic session for the benefit of 106 people who had to travel at very short notice. Four members of H.M. Forces attended the Birmingham clinic for yellow fever vaccination.

	<i>Under 9 months of age</i>	<i>9 months—5 years</i>	<i>6—21 years</i>	<i>22—70 years</i>	<i>Over 70 years</i>
Persons Vaccinated	nil	166	351	1,864	34



DIPHTHERIA, PERTUSSIS, TETANUS, POLIOMYELITIS, MEASLES  
NUMBER OF PERSONS WHO COMPLETED A **PRIMARY** COURSE DURING 1971

Year of Birth		1971	1970	1969	1968	1967	1966	1965	1964	1963	1962	1961	1960	1959	1958	1957	1956	Children Total	Adult Total
Personal and Child Health Centres	DIPH.		7	1	4	4	4	4	1	1	1							27	—
	DIPH.- TET.	223	1262	222	150	283	226	130	113	89	79	86	73	83				3,019	—
	TRIPLE	1069	3513	413	174	31	1											5,201	—
	TET.		2	2	1	1	1			1	2	11	42	109	113	121	99	505	73
	POLIO	2	3322	2305	484	278	217	141	94	82	77	70	77	41	19	21	11	7,241	17
	MEASLES		1575	1295	668	666	291	102	54	47	33	28	34	28	17	19	4	4,861	—
Day Nurseries	DIPH.																	—	—
	DIPH.- TET.	5	18	7	1	7	2											40	—
	TRIPLE	16	63	21	13	2												115	—
	POLIO		59	58	15	9	1											142	—
	MEASLES		12	12	5	4												33	—
Corporation Staff, Hospitals, Institutions	DIPH.																	—	108
	DIPH.- TET.								1			1						2	163
	TET.												3	3	6	3		15	2
	POLIO				2				1	1			2			1		7	5
Schools	DIPH. TET.							1	1		1	1	1					5	—
	TET.													1	3			4	—
	POLIO												1					1	—
	MEASLES			4	33	40	48											125	—

DIPHtheria, PERTUSSIS, TETANUS, POLIOMYELITIS, MEASLES  
NUMBER OF PERSONS WHO COMPLETED A **PRIMARY** COURSE DURING 1971 (CONT.)

Year of Birth		1971	1970	1969	1968	1967	1966	1965	1964	1963	1962	1961	1960	1959	1958	1957	1956	Children Total	Adult Total
Council House	DIPH.																	—	—
	DIPH.- TET.		2															2	—
	TRIPLE		2															2	—
	TET.																	—	38
	POLIO		3		1	1	1				1							7	6
	MEASLES		2			1												3	—
General Practitioners Premises	DIPH.		1	3	1	2	6	4	4	1	5	1	1		1			30	4
	PERT.	1	1		1													3	—
	DIPH.- TET.	40	367	221	80	60	26	18	10	17	11	9	6	7	5	2	2	881	6
	TRIPLE	684	5365	2,020	359	248	159	37	36	12	6	5	5	3	2	1	3	8,945	8
	TET.	2	28	32	55	43	37	52	81	90	119	159	193	214	257	275	246	1,883	6,695
	POLIO	620	5642	2,180	461	309	168	67	58	27	21	19	12	12	8	6	8	9,618	81
	MEASLES	61	2087	1,729	916	516	430	181	109	57	54	42	40	25	13	11	10	6,281	18
Totals	DIPH.		8	4	5	6	10	8	5	2	6	1	1		1			57	112
	PERT.	1	1		1													3	—
	DIPH.- TET.	268	1649	450	231	350	254	149	125	106	91	97	80	90	5	2	2	3,949	169
	TRIPLE	1769	8,943	2,454	546	281	160	37	36	12	6	5	5	3	2	1	3	14,263	8
	TET.	2	30	34	56	44	38	52	81	91	121	170	238	327	379	399	345	2,407	6,808
	POLIO	622	9026	4,543	963	597	387	208	153	110	99	89	92	53	27	28	19	17,016	109
	MEASLES	61	3676	3,040	1,622	1,227	769	283	163	104	87	70	74	53	30	30	14	11,303	18

DIPHTHERIA, PERTUSSIS, TETANUS AND POLIOMYELITIS, (ORAL and SALK)  
NUMBER OF PERSONS WHO RECEIVED **REINFORCING** INJECTIONS  
AND DOSES DURING 1971

Year of Birth		1971	1970	1969	1968	1967	1966	1965	1964	1963	1962	1961	1960	1959	1958	1957	1956	Children Total	Adult Total
Personal and Child Health Centres	DIPH.				3	18	13	12	17	15	17	19	4	2				120	—
	DIPH.- TET.			1	5	2874	1572	262	108	52	33	20	20	32				4979	—
	TRIPLE		1		1													2	—
	TET.					1					1	5	35	81	127	115	112	477	91
	POLIO		1	2	7	2870	1620	273	108	58	37	26	38	94	124	123	114	5495	2684
Day Nurseries	DIPH.																	—	—
	DIPH.- TET.					39	43	3										85	—
	TRIPLE																	—	—
	TET.																	—	—
	POLIO				1	39	40	2										82	—
Corporation Staff, Hospitals, Institutions	DIPH.																	—	—
	DIPH.- TET.									2								2	94
	TRIPLE																	—	—
	TET.													1	2	5	3	11	10
	POLIO									3			2	3	3	1	3	15	3
Schools	DIPH.					10	15	15	23	23	26	8	7	4	2	2		135	102
	DIPH.- TET.							1	2	1	3	1						8	—
	TRIPLE																	—	—
	TET.												1	5	5	3	2	16	—
	POLIO							1	1	1	4	1	1	1	3	2		15	—

DIPHtheria, PERTUSSIS, TETANUS AND POLIOMYELITIS, (ORAL and SALK)

NUMBER OF PERSONS WHO RECEIVED **REINFORCING** INJECTIONS  
AND DOSES DURING 1971 (CONTINUED)

Year of Birth		1971	1970	1969	1968	1967	1966	1965	1964	1963	1962	1961	1960	1959	1958	1957	1956	Children Total	Adult Total
Council House	DIPH.																	—	—
	DIPH.- TET.					1		2										3	—
	TRIPLE																	—	—
	TET.																	—	33
	POLIO							2								1		3	13
General Practitioners Premises	DIPH.					5	5	6	2	4	5		1					28	2
	DIPH.- TET.		7	72	59	971	2166	400	155	75	37	29	30	14	8	8	2	4,033	8
	TRIPLE		28	202	274	700	1104	212	96	32	18	12	9	6	6	4	3	2,706	3
	TET.	1	16	37	51	61	73	77	105	119	161	191	193	208	224	197	180	1,894	4,328
	POLIO		35	235	261	1459	3053	579	201	96	64	44	52	42	29	19	20	6,189	211
TOTALS	DIPH.				3	23	28	33	34	42	45	45	13	9	4	2	2	283	104
	DIPH.- TET.		7	73	64	3885	3781	668	265	130	73	50	50	46	8	8	2	9,110	102
	TRIPLE		29	202	275	700	1104	212	96	32	18	12	9	6	6	4	3	2,708	3
	TET.	1	16	37	51	62	73	77	105	119	162	196	229	295	358	320	297	2,398	4,462
	POLIO		36	237	269	4368	4713	857	310	158	105	71	93	140	159	146	137	11,799	2,911



## LABORATORY SERVICES

### (a) ANALYTICAL LABORATORY

The following samples were examined during the year:—

*Samples taken under the Food and Drugs Act, 1955:*

Milks .. .. .	765
Other foods .. .. .	2,109
Drugs .. .. .	407
	<hr/>
	3,281
Special drugs (Research Section) (364, hospital drugs 18) ..	382
Miscellaneous samples .. .. .	4,218
	<hr/>
	7,881
	<hr/>

### Food and Drugs Act 1955

**FOODS.** Out of a total of 2,874, 75 or 2·6 per cent received adverse reports but of these, 27 were of sub-standard though genuine milk i.e. the real rate of adulteration was 1·7 per cent compared with 1·0 per cent in the preceding year, the increase coming from watered milks.

**MILK.** The yearly total of milks examined was 765, made up of 149 samples of bottled milk, and 616 samples of churn and tanker milk. The average composition of these samples was 8·71 per cent solids-not-fat and 3·74 per cent fat making a total solids content of 12·45 per cent. Nineteen specimens of milk were found to be watered and 27 deficient in either fat or solids-not-fat but from natural causes.

Traditionally, farm milk has been filled into ten gallon churns by the farmer, collected daily and despatched to dairies for processing. Sampling of churns at city dairies has been a relatively simple matter. Over the past few years, however, farmers have been installing refrigerated tanks on their farms, capable of holding up to three days' supply of milk, and large tanker lorries, capable of carrying 3,000 or so gallons of milk, are now collecting the farmers' bulk milk for the Milk Marketing Board and delivering it to processing dairies. This is having a profound effect on milk sampling. The testing of individual farmer's milk will only be possible by sampling at the farm. The examination of bulk tanker milk will have to be most carefully done as the watering of one farmer's milk could be concealed by the mixing of the latter with large volumes of genuine milk.



It is possible that this revolution in milk collection has been at least partly responsible for an increase in milk adulteration in 1971, three prosecutions, one involving a large tanker, being taken out during the year.

The first case originated with the taking of two formal samples from the two compartments (each holding 1,500 gallons) of a large tanker consignment to a city dairy. Results were as follows:—

<i>No.</i>	<i>Fat %</i>	<i>S.N.F. %</i>	<i>F.P.D. °C.*</i>	<i>% Extraneous Water</i>
B 5700	3.4	8.1	0.510	At least 3.3%
B 5701	3.9	8.3	0.530	—

\* Freezing Point Depression. Minimum for genuine milk 0.530°C.

Although the percentage of water in B 5700 may seem small, it represented about 50 gallons water in 1,500 gallons milk. The Health Committee authorised Court proceedings against the Milk Marketing Board and at the hearing a plea of “Guilty” was made and a fine of £80 imposed.

The second adulteration of milk case was equally serious as it involved a farmer who had been prosecuted before for watering milk. The case originated with the finding of 3.3 per cent extraneous water in the bulk informal sample of a large consignment of milk to a city dairy. Formal sampling over three consecutive days gave the following results:—

<i>No.</i>	<i>Fat %</i>	<i>S.N.F. %</i>	<i>F.P.D. °C.</i>	<i>% Extraneous Water</i>	<i>Comments</i>
C 1723	3.3	8.1	0.510	At least 3.3%	Informal
C 1779	3.1	8.2	0.505	5.1	<div style="display: flex; align-items: center;"> <div style="font-size: 4em; margin-right: 5px;">}</div> <div>           1st Day            Formal            Samples of            15 churn            consignment.         </div> </div>
C 1781	3.5	8.0	0.474	10.2	
13 churns			All genuine		
C 1793	3.0	8.4	0.522	2.3	<div style="display: flex; align-items: center;"> <div style="font-size: 4em; margin-right: 5px;">}</div> <div>           2nd Day            Formal            Samples of            14 churn            consignment.         </div> </div>
C 1795	3.2	7.7	0.476	10.0	
C 1800	2.6	8.6	0.501	4.9	
11 churns			All genuine		
C 1806-C 1820		15 churns—all genuine			3rd Day

At the Court hearing, the farmer pleaded “Guilty” and a fine of £80 with £20 costs was imposed.

The third case was not so serious in that it was a "first offence" and relatively small amounts of water were involved. A first day's formal sampling indicated 11 pints water in 60 gallons milk, the second day 7 pints in 63 gallons and the third day 9½ pints in 59 gallons. On the fourth day of sampling, all specimens were genuine. At the hearing, a plea of "Guilty" was made and a fine of £15 with £10 costs imposed.

**OTHER INCORRECT FOODS.** Twenty-nine of the 2,109 foods other than milk were unsatisfactory.

A tin of imported Mandarin Orange Segments C1188 was labelled as containing 0.1 mg sodium per 100 g entire contents whereas analysis showed that 4.7 mg per 100 g was actually present. Enquiries abroad confirmed that our figure was correct and that a mistake had occurred but would be immediately rectified on subsequent labels. A number of cartons were, however, in shipment, some of which were destined for hospitals. It was agreed that in the latter case, where the amount of sodium in the diet could be of dietetic importance, a statement should be made on the invoice drawing attention to the inaccuracy in sodium content.

The Butter Regulations 1966 require a maximum of 16 per cent water in butter whereas a specimen B 5668 examined contained 17.8 per cent. Repeat follow-up samples gave 17.4 per cent and 16.6 per cent. The retailers were notified.

Some silver dragees were found, as the result of a complaint, to each contain a core of a small vegetable seed, identified as rape seed, obviously to act as an aid to manufacture. However, there was no indication of the presence of any seed in the list of ingredients and indeed the packers were under the impression that no seed was present. A misunderstanding on the part of the suppliers seemed to have been the cause of the trouble.

A can of pork luncheon meat A 3837 was seriously corroded on the inside, the contents containing 400 parts per million of tin whereas a maximum of 250 parts per million is recommended. The matter was referred to the Food Inspectors.

A small bottle of whisky C 1656 was labelled as being 75° Proof whereas analysis showed an alcoholic strength of only 70.9°. Further follow-up samples gave 75.2° and 53.7°. The latter bottle was not as full as the first repeat and the bottle closures were judged faulty, loss of alcohol being possible by evaporation.

A jar of lemon cheese B 5744 taken as a follow-up of a complaint of unpleasant odour and taste was found to be very rich in fat and egg but to have only 0.06 per cent oil of lemon, the Preserves Order 1953 requiring a minimum of 0.125 per cent. The excessive fat and egg and insufficient oil of lemon had given the product a "flat" odour and taste not at all resembling lemon curd. The manufacturers stated that they had tried to make a superior product with real lemons and promised to increase the oil of lemon content.

A bottle of cyder shandy A 4592 was found to be excessively "gassy". Yeast was present and the sample was actively fermenting, 3.2 per cent of proof spirit being present whereas a maximum of 2 per cent was declared on the label. Stock remaining was removed from sale. A specimen of Mango Squash A 4619 was likewise out of condition and was also fermenting, 3.5 per cent of proof spirit being present. The manufacturers were informed.

A sample of plain flour A4179 contained only 200 mg of chalk per 100 g flour instead of between 235-390 mg. The millers were informed.

As preservative, an orange cordial C 2176 contained 310 parts per million of sulphur dioxide (which is 88 per cent of the permitted maximum of 350 parts per million) and 620 parts per million of benzoic acid (which is 77 per cent of the permitted maximum of 800 parts per million.) The total preservative content was thus 165 per cent of the maximum, contrary to Section 3.1.(c) of the Preservatives in Food Regulations 1962. Correspondence with the manufacturers revealed that the cordial had originally been formulated for use in vending machines and as such produced a ready to drink beverage in accordance with regulations. A reduction in preservative content was promised in the cordial sold directly to the public.

A blackcurrant health drink A 1594 was labelled as containing at least 80 mg of Vitamin C per fluid ounce whereas only 31 mg per fluid ounce were actually present. Enquiries at the retailers revealed that a change of ownership had recently occurred but that the sample was from very recent stock. All faulty material was removed from sale. In the case of another blackcurrant health drink C 1331, no more than 8 per cent blackcurrant juice was found by analysis to be present, official regulations requiring at least 10 per cent. The manufacturers were notified.

A bottle of ice lolly syrup C 1884 labelled as containing a minimum of 15 mg Vitamin C per fluid ounce, was found to contain only 2 mg. The manufacturers were notified, but despite a thorough investigation, not helped by a completely blurred date coding on the label, the deficiency was not explained.

A sample of Indian Tonic Water C 1850 was deficient in quinine containing only 0.2 grain per pint whereas 0.5 grain is the official minimum. Two repeat samples gave 0.26 and 0.23 grains per pint. The bottles were in clear glass and exposure to excessive light had probably caused decomposition of quinine. The distributors undertook to reiterate this fact to their customers and in particular to warn them of window displays of this product.

A sample of table sweet A 4618 listed the ingredients present, the first item being "Pure Dairy Products" and the third item "cardimum". It was pointed out that the former is a generic and not a specified item and the latter should read "cardamom". Both errors will be corrected on revised labels, the pure dairy product present being low fat soft cheese which in future will be so declared. A technical labelling offence was also committed on the label of a sauce topping A 4628, the glucose syrup actually present being described as "glucose". The latter description should be reserved for the pure sugar dextrose.

A third labelling offence occurred with sample A 4770 of orange drink, the only particulars on the label of which was a meaningless proprietary name. It was pointed out that the name and address of the packer or labeller and the name of the article should be indicated on the label. Yet a fourth labelling offence occurred with a sample of fish soup mix A 4709, two of the stated ingredients being **generic** and not **specific** descriptions.

Two imported samples—one a lemon cream pie, the other a banana cream pie (Nos. B 6031, B 6032) were reported as wrongly described, the cream present being imitation and not real cream contrary to Section 47 of the Food and Drugs Act 1955. The manufacturers revised the labels.

A specimen of carob flour B 6000 claimed the presence of phosphorous, calcium and iron but no quantitative particulars were given as legally required. Correspondence revealed that production of this product had ceased.

A can of imported boned chicken in jelly A 4677 contained only 68 per cent whereas the Canned Meat Product Regulations require a minimum of 80 per cent. The manufacturers stated that the cans were filled by hand and the deficiency was caused by human error. A meat deficiency was also discovered in another sample of a canned meat product, namely canned minced beef in gravy C 2011, only 60 per cent instead of a minimum of 75 per cent being present. The manufacturers replied that the filling machine could have developed a momentary fault. Attempts to obtain further check samples were not successful.

The contents of a packet of red cake glaze A 4318 were found to contain the artificial red colouring matter Ponceau SX and repeat packets C 2202 were



found to be similarly coloured. Ponceau SX is not in the list of permitted food colours embodied in the Colouring Matter in Food Regulations 1966. All remaining stock was withdrawn from sale.

The Dried Milk Regulations 1965 require a maximum of 5.0 per cent moisture whereas a carton examined C 1857 contained 6.2 per cent (a repeat sample gave 6.4 per cent). Appropriate action was taken by the packers who stated that they exercised a very strict control and aimed at an absolute maximum of 4.75 per cent moisture.

A specimen of creamed rice milk pudding C 2135 was brown in colour from overcooking. Stock was withdrawn from sale.

**Mercury in Canned Fish.** Adequate attention has already been paid to the subject of mercury in tuna fish and a comprehensive monitoring is being undertaken by the Government. It was thought that samples of canned octopus, mackerel and pilchards might give high results but all three had an insignificant total mercury content of 0.02 p.p.m.

**Pesticides in Food.** A two year survey of pesticide residues in foodstuffs was made in 1966-8. The results showed that traces of organo-chlorine pesticides such as DDT were present in a significant number of the foods tested although the amounts found were small in most cases. Nevertheless, there was a real risk of accumulation in the environment of these persistent pesticides, not the least in human fat, and several countries have since put official curbs on the use of DDT particularly. It was decided to examine a number of those foods previously found to contain the highest levels of pesticide. In the event, the following were tested and found to contain **no** organo-chlorine pesticide:—

Apples, baby food (meat and vegetable), bread, butter (English), lemon cordial, orange cordial, peas, potatoes, rice, sausage (pork), steak (minced), strawberries and tomatoes.

The following contained small amounts of pesticide, thus:—

<i>Foodstuff</i>						<i>Pesticide found</i>
Chicken	..	..	..	..	..	0.053 p.p.m. dieldrin
Currants	..	..	..	..	..	0.315 p.p.m. D D T
Milk food (dried)			..	..	..	0.007 p.p.m. lindane and 0.008 p.p.m. dieldrin
Lard	..	..	..	..	..	0.074 p.p.m. T D E
Milk	..	..	..	..	..	0.003 p.p.m. lindane
Oatmeal	..	..	..	..	..	0.089 p.p.m. lindane
Tea	..	..	..	..	..	0.157 p.p.m. D D T

All samples were passed as genuine.



In 1972, a third year's sampling of food for pesticides is to be undertaken with the full co-operation of most food and drug authorities throughout the country. Procedure will follow the 1966-8 pattern but a modified list of foods is to be tested and in addition to organo-chlorine and organo-phosphorus pesticides, search will be made in certain foods for thiocarbamate, PCNB and TCNB, copper and mercury residues.

Two special investigations were carried out during the First Quarter, one on part-baked bread, the other on simulated meats made from textured vegetable protein.

**Part-Baked Bread.** This is a fairly recently introduced product made possible firstly by the use of propionic acid as preservative against mould and "rope" and secondly by the careful packing of the part-baked bread in polythene bags which additionally exclude most mould spores from the atmosphere in any case. The products of the three major bakery groups were investigated particularly with regard to deterioration of the part-baked bread on storage at room and refrigerator temperatures. Most bakeries advise storage after purchase of not longer than one day at room temperature or three days in a refrigerator—then a final baking for 15 minutes or so at 450°F. These cautions regarding storage limitations are designed to avoid mould growth before consumption and are not due to fear of the possibility of harmful bacterial growth or toxin development.

Tests carried out were reassuring and indicated that the baker's storage instructions are conservative and that if the shopkeeper is reasonably careful with his turnover of stock, the customer's final product should be quite satisfactory.

**Simulated Meat.** The production from vegetable sources of simulated meat with a chewiness, flavour and nutritional value approaching that of the real thing is a technological feat equal only to that of the introduction of margarine as a butter substitute. Such "meat" is an established fact in the U.S.A. but is only just beginning to appear in this country. The innovation has both excited some food experts and alarmed others. The latter see possible nutritional dangers to children and old people eating simulated meat to the exclusion of real meat. The Governmental Food Standards Committee initiated a review on novel proteins in general on 30th March 1971 and this review will include all aspects (labelling, nutrition etc.) of simulated meat.

**INCORRECT DRUGS.** Of 407 O.T.C. ('Over the Counter') drugs sampled informally under the Food and Drugs Act 1955, nine were found to be incorrect

A Syrup of Irish Moss C 2375 was stated to contain 0.25 per cent chloroform whereas only 0.06 per cent was present. No further stock remained and the product will not be retailed in the future.

Some cold and 'flu powders C 2473 were each stated to contain 650 mg of a mixture of aspirin, phenacetin and caffeine. The average weight of the powders however was only 525 mg with a variation of 325 to 572 mg. The composition of the powders was correct. The sample was found to be old stock of a discontinued line.

The B.P. requires sodium citrate tablets to disintegrate in three minutes whereas a sample C 2554 took eight minutes. The pharmacist was informed.

A specimen of Zinc Starch and Boric Powder was labelled B.P.C.—a minor technical error since the article was deleted from the current (1968) edition. The pharmacist concerned was notified.

In the case of two specimens of corn paint C 1848 and C 2589, evaporation of volatile solvent had occurred with a resultant concentration in the active ingredient namely salicylic acid. In the first case 9.5 per cent was declared and 17.4 per cent found whilst in the second case, 14.3 per cent was declared and 23.3 per cent found. This is a fairly common complaint with this type of product and extra special care in the type of closure employed is necessary to preserve the contents intact.

Two low calorie sweeteners A 3775 and A 4380 contained cyclamate as artificial sweetener, as was indeed declared on the packet. From 1st January 1970, only saccharin was permitted. Somehow the samples had been overlooked and not withdrawn from sale.

In all cases of the above incorrect food and drugs, remedial action was taken by the Medical Officer of Health.

**Local Drug Testing Scheme.** During the year 129 pharmacies were visited and 364 samples taken for analysis. The main groups of samples included:—

	<i>Number Taken</i>	<i>Number Incorrect</i>
Barbiturate tablets .. ..	56	2
Iron with Folic Acid tablets .. ..	42	7
Phenylbutazone tablets .. ..	13	3
Potassium Bicarbonate tablets .. ..	12	4
Eye drops .. ..	78	2
Eye ointments .. ..	85	14

The incorrect samples of the first three groups of drugs listed above failed to comply with the requirements of the B.P. disintegration test.

The incorrect barbiturate tablets are required to pass this test within 15 minutes, but even after one hour 20 per cent of the original tablet weight remained undisintegrated. The Iron-Folic acid tablets, being sugar coated, are allowed one hour for complete disintegration. After this time 20-30 per cent of the tablets remained. The Phenylbutazone tablets, also sugar coated, failed the test even after **two** hours. From two samples, only the sugar coating had dissolved and over 90 per cent of the original drug content remained in the undisintegrated portion. In the third sample 20 per cent remained after two hours.

Of the twelve samples of Potassium Bicarbonate tablets, four were underweight and deficient in drug content, whilst eight were incorrectly labelled. Two samples of Chloramphenicol eye drops were 60 per cent deficient of ingredients, suggesting dilution with water. It was noted that the bottles were **not** sealed as is usual with eye drops. The fourteen incorrect samples of eye ointments included Chloramphenicol (1 per cent), Sulphacetamide (6 per cent), and Penicillin (2,000 Units/G), with deficiencies in drug content ranging from 15 per cent upwards. One Penicillin sample was found to be 100 per cent deficient. Samples of Hydrocortisone eye ointments contained visible clusters of very fine particles of drug, indicating incomplete dispersion in the ointment base.

In all the above cases the manufacturers have been informed of our findings and remedial action taken.

#### HOSPITAL SAMPLES

Eighteen samples were examined for the Birmingham and Midland Hospital Pharmacy Committee. These consisted of:—

	<i>Number of specimens</i>			
Hydrocortisone and Neomycin eye drops .. .. .	..	..	..	7
Suxamethonium Chloride injections .. .. .	..	..	..	3
Waters and membrane filters .. .. .	..	..	..	7
Glycerin .. .. .	..	..	..	1

**Miscellaneous Samples not taken under the Food and Drugs Act.** These totalled 4,218 and were made up as follows:

#### PUBLIC HEALTH DEPARTMENT

Milk and related products .. .. .	2,328
Air pollution .. .. .	192
Waters .. .. .	730
Urines .. .. .	88
Food Inspection Section .. .. .	104
Miscellaneous .. .. .	152

---

3,594

## OTHER CORPORATION DEPARTMENTS AND COMMITTEES

Water Department (Waters 208, Miscellaneous 46)	254
Central Purchasing Department .. .. .	58
Housing Department .. .. .	12
Public Works Department .. .. .	5
Weights and Measures Department .. .. .	7
Education Department .. .. .	64
Parks (Small Holdings and Allotments) Department	22
	<hr/>
	422
Private miscellaneous samples .. .. .	202
	<hr/>
	4,218
	<hr/>

## MILK AND DAIRIES SAMPLES

The results for 1971, the second full year of operation in the analytical laboratories, were as follows:—

<i>Sample</i>	<i>Number examined</i>	<i>Number incorrect</i>
<i>Milk</i> (Bottled, Churn, Dispenser, Whirlcool, Carton).	731	Two bottled, fifteen dispenser and eight whirlcool samples failed the Methylene Blue Test.
<i>Ice-creams</i>	789	148 samples were Grade 3 or 4 in the Methylene Blue Test i.e. were unsatisfactory.
<i>Ice-lollies</i>	114	Two samples had labelling faults.
<i>Fresh cream</i>	328	Seventeen samples were "decolourised in zero hours".
<i>Imitation cream</i>	33	Six samples contained coliform organisms (not <i>E. Coli</i> however).
<i>Whole egg</i>	30	One sample failed the Alpha Amylase Test.
<i>Churn and bottle rinsings</i>	53	Two samples contained <i>E. Coli</i> organisms.
<i>Raw milk for antibiotics</i>	250	Two samples contained 0.05 and 0.25 units of penicillin per ml and five samples contained traces (less than 0.05 unit per ml).
	<hr/>	
	2,328	
	<hr/>	



WATERS. The total of 938 waters examined included 142 effluents from sewage systems in the Rivers Bourne and Blythe catchment area and 123 sub-floor waters for determination of origin (mains, sub-soil, rainwater, etc.). Routine testing of the Elan, River Severn (Trimpley) and Whitacre domestic systems continued throughout the year.

Mention was made in last year's report of the increased official interest in the plumbo-solvency of mains water and especially those derived from upland surface sources such as that of the Elan Valley. This interest has been heightened by the concern which has recently developed over pollution of the environment by lead and other heavy metals generally, particularly in industrial areas.

The lead content of the Elan Valley Supply after lime etc. treatment but **before** it enters the mains is less than 0.01 mg Pb per litre but the water is "finely balanced" and still soft and regular routine tests are carried out throughout the year to check its plumbo-solvency. The routine lead pipe coil erosion test used up to the end of 1969 was modified in 1970, the experimental lead pipe coil being replaced by an actual Birmingham domestic lead pipe supply. The monthly average lead content of **first draw-off waters** from this supply in 1970 was 0.35 mg/l (range 0.09–0.62 mg/l) whereas the corresponding 1971 results were 0.31 mg/l (range 0.21–0.49 mg/l). This compares with the W.H.O. recommended limit of 0.30 mg/l. Results over the year for the routine laboratory lead strip test were normal, (average of 109 units for 1970, average of 113 units for 1971). The first draw-off waters from twelve individual houses (up to 50 years old or more) with lead pipe supplies gave results for lead of 0.08 to 0.30 mg/l Pb in eleven cases, and 0.49 mg/l Pb in the remaining case. This latter supply is being carefully watched: repeats have given 0.54 and 0.18 mg/l Pb which reflects the notoriously erratic nature of the phenomenon. Further groups of houses are to be tested in 1972.

It is interesting to note that the stringent 0.05 mg/l Pb W.H.O. International Maximum for **running** piped supplies (i.e. in normal use) has been raised to 0.10 mg/l Pb in the 1970 W.H.O. European Standards for Water Supplies. (The European Standards are, if anything, a little more stringent than the International ones). City mains water in normal use rarely exceeds 0.10 mg/l Pb/litre.

The Whitacre supply being derived from purified river water is hard and no plumbo-solvency problems have arisen. The lead content before distribution is about 0.03 mg Pb/litre. The present interest in environmental pollution has stimulated the testing of water supplies for other toxic substances. In addition to lead, stringent W.H.O. European Standards are laid down for arsenic



(0.05 mg/l As), selenium (0.01 mg/l Se), chromium (0.05 mg/l hexavalent Cr), cadmium (0.01 mg/l Cd) and cyanide (0.05 mg/l CN). Both the Birmingham and Whitacre supplies were tested for these substances and also for barium and phenolic substances which are included in the W.H.O. **International** limits. Both supplies were perfectly satisfactory.

No difficulty has been experienced in maintaining the fluoridation of the Birmingham mains supply at a level of 0.9 to 1.1 p.p.m. F. The analytical determination of the level has been revolutionised by the introduction of the specific fluorine ion electrode.

**SAMPLES OTHER THAN WATER.** Eighty-eight food and drug complaints were received from the Public Health Inspectors. Among the more interesting cases was one of ? cotton or fibrous matter in a minced meat hamburger. The fibrous matter was in fact finely shredded connective meat tissue. Some whisky with a fungal growth was found to consist of two thirds whisky and one third ginger ale. Grey staining of a box of six mince pies was traced to a rubbing movement of the soft aluminium containers against cardboard and transference of this stain to the lower tier of pies. An unusual complaint concerned pickled onions, the vinegar of which had developed a cloudiness, the onions themselves becoming brown-stained. This is believed to be associated with the caramel in the vinegar, only some grades of which are suitable for pickling.

**Lead and Other Heavy Metals in the Environment.** This subject is receiving very close attention at the present time and our air, water, food and even cosmetics are all involved. During the year four samples of black eye make-up as used by certain sections of the coloured population were examined. In three cases the powder consisted of lead sulphide and in the other mercury sulphide making all four samples unsuitable for their intended use. Following a report that lettuce had been found to contain 0.3 to 50 p.p.m. lead, five samples were examined: Four contained nil and the fifth 0.18 p.p.m. lead on the lettuce as received. It was found that the report had given figures on the **dry** samples and as lettuce contains 95 per cent or so of water, the amounts of 0.3 to 50 p.p.m. quoted were equivalent to about 0.015 to 2.5 p.p.m. on lettuce as eaten. The official limit of the Lead in Food Regulations 1961 is 2.0 p.p.m.

Following the illness of a child from suspected lead poisoning, specimens of paint scrapings from the woodwork and walls of the child's home were examined. Considerable lead (6.7 per cent) was found in window woodwork paint and lesser amounts elsewhere. In another case, paint scrapings were taken from the woodwork of the living room. No less than 31.8 per cent lead

was found in the scraings from the door frame and lead poisoning was later confirmed. In yet another case a child's toy train set with red and yellow paint also came under suspicion. No lead or chromium was present in the red paint but the yellow contained lead well in excess of the 5,000 parts per million maximum required by the Toys (Safety) Regulations 1967, some 20,000 parts per million (2 per cent) being present. The train was probably from old stock. Another train set was perfectly satisfactory.

A check on the 4 in. and 6 in. coloured gummed paper squares as used by children in city schools showed that of ten different colours, all 6 in. squares were free from lead and other toxic metals but that a little old stock of 4 in. yellow and light green squares containing yellow lead chromate (3 per cent and 1.75 per cent respectively of lead) still remained. All suspect paper was immediately recalled and replaced with new satisfactory material. All current paper, gummed and otherwise was re-checked and found free from harmful metals.

Concern over lead in petrol (added as "Antiknock" in the form of tetraethyl and tetramethyl lead) resulted in a special investigation of the lead content of petrol sold in the City. Forty-seven samples of various grades and brands were examined. British Standard B.S. 4040. 1971 specifies a maximum of 3.80 grammes lead per U.K. gallon and all samples had lead contents less than this maximum. In some brands there was a progressive increase in lead content from 2 star to 5 star grade but in others, the amount of lead was the same for all grades.

**Metals in the Environment.** Atmospheric dusts in industrial areas contain surprisingly high amounts of heavy metals especially lead and zinc: copper, chromium, nickel and cadmium are also to be found. In some cases the total heavy metal content reaches 1 per cent or more. A comprehensive survey involving the sampling of 3,000 dusts for determination of lead and other heavy metals is being undertaken in the City in 1972.

**Paraquat Weedkillers.** Paraquat is a very effective, useful weedkiller but like many other chemicals in general use today is toxic and instances are on record of accidental poisoning due to the misuse of its preparations. Samples of commercial preparations on sale to the general public were bought and an investigation undertaken of composition, labelling and compliance with legal requirements in an endeavour to find ways of improving control of the chemical.

**Ergometrine Maleate Injections.** These are used by midwives and, following complaints of discolouration of ampoules, an examination of stock held at the Public Health Department Stores showed that about 5 per cent of one particular batch were affected. Faulty stock was returned to the suppliers.

OTHER CORPORATION DEPARTMENTS. Apart from 208 waters received from the Water Department and already mentioned, a range of samples totalling 214 was received from other departments of the Corporation. These included 58 soaps and detergents from the Central Purchasing Department examined for tender and contract purposes. Ten paints and two cases of paint film failure on timber were dealt with for the Housing Department. Six samples of rum and vodka mixed drinks were tested for the Weights and Measures Department to check that the correct measure (1/6 gill) of spirit had been supplied in the mixtures: all were reported as satisfactory. Twenty routine samples of fertiliser were examined under the Fertilisers and Feeding Stuffs Act 1926 for the Parks Department: five specimens had technical discrepancies.

PRIVATE INDIVIDUALS AND INSTITUTIONS. Eighty-three cases of foreign matter in food were received directly from the public. In one case an uncooked joint of lamb was noticed to glow in the dark. This peculiar phenomenon has been reported previously and is the result of certain bacteria producing phosphorescence. The meat can still be fresh and harmless in such cases. An unpleasant smell in a sample of sugar was traced to the fact that the sample was very fresh and a lingering "refinery odour" had not completely been dispersed. A lettuce appeared abnormal in that it had a thin colourless skin in places on the leaves. This was in fact the natural epidermal layer which had separated through frosting in a refrigerator. A bottle of lemonade contained 0.06 per cent v/v turps substitute the result of yet one more case of misuse of such bottles. A small piece of stiff nickel steel in a loaf was identified—the shape of the fragment suggested a portion of a sieve and this was later confirmed by the manufacturers who reported a faulty flour sifter. Crystals in a processed cheese were found to be disodium hydrogen phosphate, a permitted emulsifying salt. Some sugar contained 6.5 per cent common salt and white particles in tinned grapefruit proved to be the usual crystals of naringin, the natural bitter principle of grapefruit. Because of their chemical taste, eggs were tested for organochlorine pesticides but only an insignificant amount (0.018 p.p.m. of lindane) was detected. Following illness, some canned mackerel was tested for mercury but only 0.04 p.p.m. was found. Where necessary, cases were referred to the Food Inspectors for suitable action.

Miscellaneous investigations undertaken included a case of some dog food which intriguingly contained 14 per cent of seaside pebbles, in shape and colour closely resembling pieces of real dog food. The case was referred to the Chief Weights and Measures Inspector for investigation under the Trade Descriptions Act. A black residue examined on behalf of a local Trades Union for possible harm to those workers handling it, consisted of an unpleasant mixture of finely



divided iron 86 per cent and 14 per cent mineral oil; and from the same union, a dust was found to be typical of fine fuel ash. Yet other substances examined were a liquid, methyl ethyl ketone M.E.K. and a solid which proved to be zinc stearate. On removing the outer wrapper from an aerosol hair spray, the user was alarmed to see the cannister labelled "Fly Spray" underneath. Fortunately the product **was** a hair spray, some redundant fly spray cannisters having been used. A fine dark grey deposit scraped from a greenhouse roof was found to contain no less than 54 per cent aluminium metal and the results were passed on to the Chief Air Pollution Officer. Tampering with food resulted in samples of pasteurised milk and liquor from boiled salted cod being examined. In the former case, 150 mg phenobarbitone was found in the one third pint of milk submitted and in the latter case, the 390 ml sample was found to contain 0.11 per cent potassium cyanide. Other similar cases involved mixed grill, bicarbonate of soda, a blackcurrant drink and a coffee and chicory essence. Only in the latter case was anything potentially harmful found namely a warfarin mouse bait. The actual amount and concentration of warfarin however was such that the addition was harmless.

**PROGRESS IN FOOD LEGISLATION.** Relatively little new food legislation was brought out during the year. Stricter control of the nitrate and nitrite present in bacon, ham and pickled meat was introduced on 1st September 1971 in the form of an Amendment to the Preservatives Regulations 1962. Proposals to amend the Bread and Flour Regulations 1963 were issued in October 1971, the main item being the proposed inclusion of azodicarbonamide and L-Cysteine hydrochloride, within limits, as additional alternatives to the flour improving agents at present permitted. These substances offer certain technological advantages over those used at present, sufficiently so in the opinion of the Food Additives and Contaminants Committee, to justify their addition to the permitted list.

An echo of the banning of cyclamates in food as artificial sweetener was received by local authorities in September 1971 in the form of a letter requesting that a close watch be kept on all canned imported fruit as there was a possibility that cyclamates might be present. In the event, none was detected in about twenty different samples examined.

Four official reviews were announced during the year concerning the use of butylated hydroxytoluene (B H T) as an antioxidant, novel proteins, liquid freezants of food and the date marking of food. B H T has always been a little suspect and at the present time is not allowed in infants' food. The question of the introduction, especially in the U.S.A. of simulated meat has already been dealt with earlier in this report.

The date marking of prepacked perishable food is an emotive topic and much can be said for and against the proposal. In general, public health authorities would welcome the suggestion but certain trade interests are dubious about its advantages.

Finally a Food Standards Committee report on vinegars must be mentioned. The report recommends that definitions and appropriate designations should be made for malt, grain and spirit vinegars. No product should be sold as "vinegar" unqualified, but the report suggests that for compound foods in which vinegar is an ingredient, e.g. pickles, the unqualified description "vinegar" could be used. This rather illogical last suggestion is receiving strong opposition from vinegar manufacturers.

## (b) PUBLIC HEALTH LABORATORY

Dr. J. G. P. Hutchinson, Director of the Public Health Laboratory has, kindly supplied the following information:—

### VENEREAL DISEASES EXAMINATIONS FOR BIRMINGHAM FOR THE YEAR ENDING 31st DECEMBER, 1971

<i>Specimens</i>					<i>Examinations</i>				
Bloods	..	..	..	27,603	For Wassermann Test	..	..	22,730	
					„ Gono. Fixation Test	..	..	1,219	
					„ V.D.R.L. Test	..	..	26,484	
					„ Reiter P.C.F. Test	..	..	256	
C.S. Fluid	..	..	..	576	For Wassermann Test	..	..	576	
					„ Cell count	..	..	45	
TOTAL				28,179	TOTAL				51,310

Blood specimens for Wassermann reaction examined during the year ending 31st December 1971 from Birmingham Ante-Natal Centres and Maternity Hospitals:—

					<i>Number of specimens</i>	<i>"Diagnostic" reactors</i>
From Antenatal Centres:	..	..	..	..	2,722	6
From Maternity Hospitals:	..	..	..	..	9,344	38



# TUBERCULOSIS

## Notifications

There were 521 new notifications of tuberculosis in 1971, a decrease of 90 compared with 1970, and 70 less than the previous low record of 591 in 1969. This clear-cut decline in notifications is in contrast to the comparatively small and irregular changes during the previous three years, and encourages the hope that the long term downward trend is being resumed.

The notification rate for 1971 was 0·51 per 1,000 population, also a new low record. The decline in notification rate is rather less striking than the fall in the number of notifications because of a fairly substantial fall in the population of the City in 1971.

The decline in notifications occurred entirely in the respiratory forms of the disease, for which the number of notifications declined by 95 to 370. There was a small increase in the number of notifications of non-respiratory tuberculosis, up by five to 151.

Almost exactly one-half of the total number of persons notified were born in Asia, mostly in India and Pakistan. The proportion born in England was one-third of the total, with 8·4 per cent of Irish birthplace, 1·6 per cent were born in Scotland or Wales, and only 2·7 per cent in the British Caribbean area—the continuation of only very small numbers from this area is of considerable importance in considering the epidemiology of tuberculosis in immigrant groups. There are indications that the large number of notifications in the Asian group is related to the high incidence of tuberculosis in their native lands rather than to their immigration to this country. Further details about place of birth of those notified are given in Tables 8 and 9.

## RESPIRATORY TUBERCULOSIS

A large part of the decline in notifications occurred in males, with a fall of 66 to 226. The fall was fairly widely spread among the age-groups, and occurred amongst both native-born and immigrants. The largest contributions to the decline were in immigrant males age 15-19 years and 25-34 years, and in native-born males age 65 years and over.

Notifications of respiratory disease in females also declined, by 29 to 144. The pattern here is a little more complex, as there was a small increase in the number of notifications of immigrants age 15-34 years, possibly associated with continued immigration of this group. The decline was otherwise fairly general, the largest contribution being in immigrants age 35-44 years.

## NON-RESPIRATORY TUBERCULOSIS

The increase in notifications occurred entirely in males, with a rise of 15 to 91. The greater part of this increase occurred in native-born males, for whom there were only six notifications of non-respiratory disease in 1970, increasing to 17 in 1971. Amongst females, notifications of non-respiratory forms of the disease fell by 10 to 60, the fall occurring entirely in native-born females.

Table 6 shows the localisation of the disease, and also shows that the majority of cases of non-respiratory tuberculosis occur amongst the immigrant population. There is little change in the distribution amongst the non-respiratory sites, glandular tuberculosis remaining by far the commonest.

## BACTERIAL DRUG RESISTANCE

As noted previously, the information on this has to be given a year in arrear because of the considerable time-lag before the laboratory work and compilation of results can be completed.

	<i>Number of patients first found to be excreting drug resistant bacilli</i>		<i>Number of patients continuing to excrete drug-resistant bacilli for more than 1 year</i>
	<i>On diagnosis</i>	<i>During or after treatment</i>	
1956	7	90	—
1957	13	101	46
1958	8	39	67
1959	7	19	61
1960	10	18	67
1961	12	29	47
1962	9	15	45
1963	6	16	41
1964	11	19	31
1965	9	16	34
1966	18	12	25
1967	18	11	27
1968	18	10	21
1969	26	8	19
1970	14	6	14

As can be seen from the table, the number of patients found to be excreting drug resistant organisms on diagnosis was 14 in 1970, a substantial fall compared with each of the previous four years. It is of some interest that none of

the 14 patients was born in Birmingham, or even in England: ten were born in Asia, two in Eire, and one each in Scotland and the British Caribbean area.

New discoveries of patients excreting resistant organisms during or after treatment remained at a low level, six, two less than in the previous year. The number of patients known to be continuing to excrete resistant bacilli over a considerable period also continues to decline, being 14 in 1970 compared with 19 in 1969 and about 60 ten years previously.

## Mortality

There were 27 deaths attributed to tuberculosis in 1971, two less than the previous low record of 29 in 1969, and substantially less than the 51 deaths attributed to tuberculosis in 1970. The mortality rate for 1971 was 0.03 per 1,000.

### RESPIRATORY TUBERCULOSIS

The majority of deaths, 20, were due to respiratory tuberculosis, and 16 of these were males. The youngest person to die of respiratory tuberculosis was age 39 years: he forms one of a sub-group of 11 in whom death occurred shortly after diagnosis of gross disease. Many of these patients, and all the younger ones, were males living alone in unsatisfactory conditions; many of them are known to have been alcoholics, and had avoided medical attention.

Four deaths can reasonably be attributed to the late effects of tuberculosis diagnosed many years previously, and treated successfully in the sense that the patients became non-infectious, though dying of the destructive effects of the disease many years later.

For the remaining five deaths there were major associated diseases, which in some cases certainly were more directly the cause of death than the active tuberculosis which was present.

### NON-RESPIRATORY TUBERCULOSIS

There were seven deaths from non-respiratory disease, and the pattern reflects that recorded for notification, in that five of these seven deaths were of immigrants. All three who died under age 25 years were male immigrants, the causes of death being tuberculous meningitis, tuberculous pericarditis and abdominal tuberculosis. One of the two persons in the age group 25-44 at

death was also an immigrant, the cause of death being abdominal tuberculosis. One elderly lady of 89 years was recorded as dying from tuberculous adenitis, but death was probably mainly due to malignant disease which was also present.

#### DEATHS OF PERSONS NOT NOTIFIED BEFORE DEATH

Nine of the persons dying from tuberculosis had not been notified before death; for three of these a posthumous notification was received, and for the other six the only information received was based on the death certificate. This represents an improvement on the position of the previous year, when there were 22 deaths of persons not notified before death.

#### Prevention and Control

The methods of prevention and control described in previous reports were continued. The figures for the tuberculin testing and B.C.G. vaccination of school children are given in the section dealing with immunisation. The homes of children found tuberculin positive under this scheme are visited by tuberculosis health visitors, to skin test other children, and arrange x-rays for the adult members of the household. This entailed 1,257 visits during 1971, and a total of 379 x-ray examinations were arranged.

Immigrant school children are tuberculin tested at the Clinic run by the School Health Service, 380 were found tuberculin positive and referred to the Chest Clinic for x-ray examination.

Tuberculosis health visitors made 12,860 visits to the homes of notified patients and their contacts during the year. Chest x-rays were carried out on 2,781 contacts, 1,213 at the Chest Clinic and 1,568 at the Chest Radiology Centre. The number of contact examinations is less than previously, as would be expected with a decline in notifications.

#### FOLLOW-UP AND AFTER CARE

The items of work under this category continued at a much lower level than a few years ago:

Grants of free milk	..	..	..	..	..	..	..	342
Issues of beds, bedding and nursing utensils	..	..	..	..	..	..	..	9
Grants of clothing or fuel from Tippet's Bequest Fund	..	..	..	..	..	..	..	8
Disinfections	..	..	..	..	..	..	..	1



## REHOUSING

Applications for help with rehousing have been greatly reduced by the combination of the fall in tuberculosis and the progress of the rehousing campaign in the City. Only 53 applications for assistance with rehousing were made during the year: additional points were allocated on health grounds to 38, and ten new recommendations for rehousing under the quota scheme were made in the year. There were seven quota recommendations outstanding at the end of 1970 and 11 of the total of the 17 were rehoused in the year. Another 15 families were rehoused under the points scheme.

## REHABILITATION

The great majority of patients with tuberculosis can now return to their former work after a comparatively short absence: the need for rehabilitation is now quite small. Twenty patients were helped with written reports to the Disablement Resettlement Officer, and two attended courses at the Industrial Rehabilitation Unit.

TABLE 1

### TUBERCULOSIS—ALL FORMS

#### PRIMARY NOTIFICATIONS AND DEATHS FOR THE YEARS 1901—1971

	<i>Primary Notifications</i>	<i>Rate per 1,000 population</i>	<i>Deaths</i>	<i>Rate per 1,000 population</i>
1901—1910 (average)	—	—	1,309	1.65
1911—1920 ( „ )	—	—	1,284	1.46
1921—1930 ( „ )	1,824	1.91	1,031	1.08
1931—1940 ( „ )	1,284	1.24	883	0.85
1941—1950 ( „ )	1,297	1.25	727	0.72
1951—1955 ( „ )	1,321	1.18	292	0.26
1956—1960 ( „ )	962	0.88	128	0.12
1961—1965 ( „ )	741	0.67	72	0.07
1966	692	0.63	49	0.04
1967	649	0.59	40	0.04
1968	632	0.59	41	0.04
1969	591	0.54	29	0.03
1970	611	0.56	51	0.05
1971	521	0.51	27	0.03



TABLE 2

## RESPIRATORY TUBERCULOSIS

PRIMARY NOTIFICATIONS AND DEATHS FOR THE YEARS 1901—1971

	<i>Primary Notifications</i>	<i>Rate per 1,000 population</i>	<i>Deaths</i>	<i>Rate per 1,000 population</i>
1901—1910 (average)	—	—	993	1.25
1911—1920 ( .. )	—	—	1,059	1.20
1921—1930 ( .. )	1,533	1.61	892	0.94
1931—1940 ( .. )	1,082	1.05	793	0.76
1941—1950 ( .. )	1,124	1.10	660	0.65
1951—1955 ( .. )	1,183	1.06	272	0.24
1956—1960 ( .. )	856	0.78	119	0.11
1961—1965 ( .. )	619	0.59	66	0.06
1966	586	0.53	45	0.04
1967	529	0.48	37	0.03
1968	493	0.46	38	0.04
1969	455	0.42	27	0.02
1970	465	0.43	46	0.04
1971	370	0.37	20	0.02

TABLE 3

**NON-RESPIRATORY TUBERCULOSIS**  
**PRIMARY NOTIFICATIONS AND DEATHS FOR THE YEARS 1901—1971**

	<i>Primary Notifications</i>	<i>Rate per 1,000 population</i>	<i>Deaths</i>	<i>Rate per 1,000 population</i>
1901—1910 (average)	—	—	317	0.40
1911—1920 ( „ )	—	—	224	0.26
1921—1930 ( „ )	290	0.31	139	0.14
1931—1940 ( „ )	202	0.19	90	0.09
1941—1950 ( „ )	160	0.16	67	0.07
1951—1955 ( „ )	139	0.12	20	0.02
1956—1960 ( „ )	106	0.10	9	0.01
1961—1965 ( „ )	102	0.09	6	0.01
1966	106	0.10	4	0.00
1967	120	0.11	3	0.00
1968	139	0.13	3	0.00
1969	136	0.13	2	0.00
1970	146	0.13	5	0.00
1971	151	0.15	7	0.01

TABLE 4

**NOTIFICATIONS OF RESPIRATORY TUBERCULOSIS BY SEX**  
**AGE GROUP AND PLACE OF BIRTH**

**MALES**

<i>Age group Years</i>	<i>1953/55 (Mean)</i>	<i>All birth Places</i>			<i>Born in British Isles 1971</i>	<i>Born Elsewhere 1971</i>
		<i>1969</i>	<i>1970</i>	<i>1971</i>		
0—4	39	28	24	23	19	4
5—9	34	18	10	14	11	3
10—14	29	20	19	13	6	7
15—19	64	36	31	11	1	10
20—24	64	26	22	24	9	15
25—34	114	38	47	27	11	16
35—44	101	37	46	40	20	20
45—54	112	36	40	31	19	12
55—64	92	42	28	30	21	9
65+	34	25	25	13	11	2
All Ages	683	306	292	226	128	98

## FEMALES

Age groups Years	1953/55 (Mean)	All birth Places			Born in British Isles 1971	Born Elsewhere 1971
		1969	1970	1971		
0—4	32	23	27	19	16	3
5—9	36	12	10	10	8	2
10—14	29	9	10	5	2	3
15—19	75	17	9	16	4	12
20—24	73	7	17	18	6	12
25—34	112	25	31	30	8	22
35—44	53	28	36	21	9	12
45—54	30	12	17	9	6	3
55—64	23	12	6	8	7	1
65+	14	4	10	8	7	1
All Ages	477	149	173	144	73	71

TABLE 5

NOTIFICATIONS OF NON-RESPIRATORY TUBERCULOSIS BY SEX  
AGE GROUP AND PLACE OF BIRTH

## MALES

Age group Years	1953/55 (Mean)	All birth Places			Born in British Isles 1971	Born Elsewhere 1971
		1969	1970	1971		
0—4	5	2	0	3	3	0
5—9	12	5	1	2	1	1
10—14	5	7	5	6	0	6
15—19	6	15	13	10	1	9
20—24	9	4	3	11	0	11
25—34	14	18	25	18	2	16
35—44	3	16	17	21	2	19
45—54	5	6	9	10	3	7
55—64	2	4	2	6	3	3
65+	2	0	1	4	2	2
All Ages	63	77	76	91	17	74

FEMALES

Age group Years	All birth Places				Born in British Isles	Born Elsewhere
	1953/55 (Mean)	1969	1970	1971	1971	1971
0—4	8	1	1	2	1	1
5—9	7	1	2	3	3	0
10—14	7	1	5	2	1	1
15—19	10	9	7	3	0	3
20—24	11	8	8	13	3	10
25—34	15	18	18	11	0	11
35—44	6	8	14	13	0	13
45—54	4	6	7	7	0	7
55—64	2	2	5	3	1	2
65+	2	5	3	3	3	0
All Ages	72	59	70	60	12	48

TABLE 6

NOTIFICATION OF NON-RESPIRATORY TUBERCULOSIS  
BY SITE OF DISEASE  
(all ages, both sexes)

	Total				Born in British Isles	Born Elsewhere
Disseminated .. ..	..	..	..	3	1	2
Meningitis .. ..	..	..	..	3	1	2
Bones, joints and spine .. ..	..	..	..	23	7	16
Abdomen .. ..	..	..	..	28	7	21
Glands .. ..	..	..	..	86	11	75
Other sites .. ..	..	..	..	8	1	7
				151	28	123

TABLE 7

DEATHS FROM RESPIRATORY TUBERCULOSIS  
BY SEX AND AGE GROUP

Age Group Years									Males	Females
0—4	..	..	..	..	..	..	..	..	0	0
5—14	..	..	..	..	..	..	..	..	0	0
15—24	..	..	..	..	..	..	..	..	0	0
25—44	..	..	..	..	..	..	..	..	3	0
45—64	..	..	..	..	..	..	..	..	8	1
65+	..	..	..	..	..	..	..	..	5	3
All Ages	..								16	4

TABLE 8

PLACE OF BIRTH OF INDIVIDUALS NOTIFIED AS SUFFERING  
FROM TUBERCULOSIS IN BIRMINGHAM

	1956/57 (Mean)	1958/59 (Mean)	1960/61 (Mean)	1962/63 (Mean)	1964/65 (Mean)	1966 (Mean)	1967 (Mean)	1968 (Mean)	1969 (Mean)	1970 (Mean)	1971 (Mean)
<i>British Isles</i>											
England	773	626	531	433	355	332	283	241	218	216	176
Scotland	15	8	12	13	9	9	8	10	12	4	5
Wales	19	16	11	16	11	11	16	6	5	6	3
Ireland	131	122	110	86	78	67	59	57	55	42	44
<i>Rest of Europe</i>	12	10	8	7	8	5	7	8	4	1	3
<i>Asia</i>											
India	27	26	19	33	65	91	112	122	120	127	110
Pakistan	26	60	90	110	134	141	127	153	139	162	143
Others	9	13	6	10	12	6	4	4	5	10	9
			(All Aden)								
<i>Africa</i> ..	4	2	3	4	4	7	6	13	9	18	11
<i>America</i>											
West Indies	11	13	26	15	20	13	20	15	12	13	14
Others	1	2	1	1	1	2	0	0	0	2	1
<i>Not known</i>	26	18	20	13	10	8	7	3	12	10	2
<b>TOTALS</b>	<u>1,054</u>	<u>916</u>	<u>837</u>	<u>741</u>	<u>707</u>	<u>692</u>	<u>649</u>	<u>632</u>	<u>591</u>	<u>611</u>	<u>521</u>

TABLE 9

NOTIFICATION OF TUBERCULOSIS (All Forms)  
IN CHILDREN IN BIRMINGHAM 1971

Place of birth of parents				Age group of children notified (years)				No. born in U.K.
				0-4	5-9	10-14	0-14	
U.K. ..	..	..	..	18	9	3	30	30
Ireland ..	..	..	..	3	6	3	12	11
Pakistan ..	..	..	..	12	3	14	29	8
India ..	..	..	..	11	5	3	19	11
British Caribbean ..	..	..	..	1	2	2	5	5
Other ..	..	..	..	2	3	2	7	5
				47	28	27	102	—
No. of children born in U.K. ..				39	22	9	—	70



# CARE OF MOTHERS AND YOUNG CHILDREN

## Section 22—National Health Service Act, 1946

### Medical Officers in Department

The satisfaction derived from the type of work carried out at clinics in health centres by Medical Officers in Department is in a direct ratio to the interest in their work and their training in developmental paediatrics. Those doctors who involve themselves in this art and in the family background derive an interest and a more complete picture of the preventive aspect of health than those who look upon clinic work as a routine physical examination of a child which can be a dull, repetitive and unrewarding procedure.

With the falling infant mortality rate, with the advent of antibiotics and the more advanced skills of neonatal surgery and the skill of neonatal paediatricians, it is inevitable that the number of handicapped children living beyond babyhood increase year by year. There is still room for the reduction in the number of handicapped children by careful antenatal, natal and post-natal care; by genetic counselling, by advanced family planning methods both domiciliary and at clinics, by health education and by better environmental and social conditions.

The needs of the handicapped child are being recognised by the setting up of assessment centres at district hospital and teaching hospital level. There is a need for doctors skilled in developmental paediatrics who have also training in the recognition and causation of emotional and behaviour problems in children. A number of these specially trained doctors, by the very nature of their duties, will have to work in the community with general practitioners, with consultants at assessment centres and in the family background. This type of work would eminently suit women doctors who often, with family commitments, can only devote part of their time to medicine. As stated however, they would need intensive training in these new fields so that their work might be absorbing and of interest. To obtain the confidence of a mother and a family with a handicapped child requires a considerable amount of time, patience, tact and understanding as well as experience.

It is becoming increasingly difficult to recruit staff of such calibre and training, and more difficult to retain them in the service against the rival claims of work more rewarding financially and of equal interest, in other fields of medicine. During the year 1971 there has never been a full quota of medical staff so that the medical examination of children under the age of five years at present at child health centres and at health centres declines year by year.

## Lead Poisoning in Infants

There has been an apparent increase in the number of cases of lead poisoning in infants over the past three years. A large proportion of these children are



Chewed paint and woodwork. Marks by teeth clearly visible.

Asians who in most instances have chewed paint from window sills, bannisters of stairs, etc. in old property. One of the reasons why this should happen is the apparent boredom of the child as the Asiatic parent, particularly in this climate with children indoors for a major portion of the day, does not recognise the value of play materials in stimulating the child and furthering his development. When a paediatric consultant reports a case of raised lead blood level, the house is always visited, usually by a medical officer, and the paintwork examined throughout the house to see if there is any evidence of the child chewing on the paintwork. Samples of the paint are taken and an estimation of the lead content is carried out on all of these samples. The results of the analyses are forwarded to the consultant paediatrician. The householder is advised to strip off the old paint containing lead and to redecorate throughout with one of the newer paints which does not contain lead. In some instances it has been found that there is no evidence of the child chewing the paintwork. It may not be unreasonable to infer that the use of Surma, an eye cosmetic which is nearly pure lead sulphide, may also be implicated. This matter is being further looked into.

### **Health Centres and Personal and Child Health Centres**

Newtown Health Centre was the only health centre to be commissioned this year. However on 31st December 1971 work had started on the conversion of Small Heath personal and child health centre to a health centre. Work has also started on the new Sparkbrook health centre and it is hoped that in the first week of January 1972 the contractors will be on the site to begin work on the new Castle Vale health centre.

During the year the attendances at personal and child health centres continued to be closely scrutinised to see whether further centres can be closed if they are not being used to the extent they should. When a personal and child health centre is being closed alternative arrangements are made for the services, if at all possible, to be transferred to a nearby church hall, community hall or tenants' hall.

### **Personal and Child Health Centres**

At the end of 1971 there were 49 centres, eight of which are designated as health centres, and eight subsidiary clinics. During the year a new health centre opened in Newtown and the personal and child health centre closed at 168 East Meadway. A subsidiary clinic was set up in a church hall near the East Meadway premises in order to maintain a clinic service in the area.

Some of the health centres in adapted or temporary premises are already becoming inadequate due to the increasing numbers of people using them for health and social needs.



There was a further decrease in the number of sessions held by medical officers. In 1970, the figure was 3,968, in 1971, 3,634. Health visitor advisory sessions totalled 2,565, an increase of 265 on the 1970 total of 2,300. Despite an overall decrease of only 20 clinic sessions, there has been an increase of 1,648 on the total number of child attendances compared with 1970. There has been a decrease in the numbers of expectant mothers attending for ante-natal care but an increase in the number of women attending relaxation and mothercraft classes.

Individual children living outside the city attending city clinics totalled 413 of whom 220 attended general practitioner sessions.

Premises continue to be used by other statutory departments of the Corporation, the probation service and voluntary organisations. The Social Services Department held 55 adoption clinics at Carnegie personal and child health centre. At these sessions the examinations were carried out by medical officers and a health visitor gave assistance. From a total number of 172 children examined, 6 were found to be unsuitable for adoption.

The pre-school play groups continue to flourish with waiting lists at all the centres. The special play groups for children with handicaps have a steady attendance. During the year a new group has been started at Warren Farm Road centre. These are very much a team orientated activity, with medical officers, health visitors, physiotherapists and other centre staff, aided by voluntary workers, combining their efforts to provide help and stimulation for the children attending the groups.

The popularity of the physical activity classes for the elderly is undiminished. In addition to the exercises and health talks, simple screening procedures have been carried out such as weighing and blood pressure and urine checks, at some of the groups. The number of attendances has risen to 4,242 as compared with 3,744 in 1970.

## **Work at Local Authority Clinics**

### **(1) ANTENATAL CLINICS:**

These are combined with children's clinics. Some 52 expectant mothers attended for examination and 1,441 for blood tests only. These attendances continue to decrease.

(2) POSTNATAL EXAMINATIONS:

Primary examinations totalled four, with one re-examination.

(3) RELAXATION AND MOTHERCRAFT CLASSES:

1,472 sessions were held and the number of individual women attending was 1,710 who made 9,046 attendances during the year. This is an increase on the 1970 attendance figures, although the number of sessions held dropped by 24.

(4) REMEDIAL EXERCISE CLASSES:

111 children made 653 attendances at sessions held by physiotherapists in seven clinics, in two of the clinics the sessions were combined with relaxation sessions for expectant mothers.

(5) (a) SPECIAL CONSULTATION CLINICS AT CARNEGIE:

These sessions ceased during 1971 owing to the prolonged illness of the visiting consultant.

(6) ORTHOPTIC SCREENING:

This valuable service continued to be given by orthoptists on a sessional basis. Two hundred and thirty sessions of orthoptic screening were held in clinics throughout the city.

(7) SEWING CLASSES:

Twenty classes were held each week in the centres, compared with 24 in 1970. These were well attended, with a total of 5,922 attendances.

(8) INTERVIEWS:

The number of interviews given to individuals, other than those attending for special sessions, has increased again during the year. The total in 1971 was 23,164 compared with the 1970 figure of 20,214. Parents' evening meetings were held on 32 occasions during the year at which there were 666 attendances.



#### (9) CHIROPODY TREATMENT:

One chiropodist held 41 sessions at one clinic during the year. 416 appointments were sent and 266 attendances made. Some 294 appointments were sent to children and 122 to expectant and nursing mothers. The average attendance per session was 6.4.

#### (10) SCREENING TESTS FOR DEAFNESS:

There has been an increase in the number of deafness screening tests carried out in the clinics, the figure being 8,847, compared with 8,787 in 1970. There was a decrease in the number of tests done during domiciliary visits, these amounted to 247, compared with 326 in 1970.

#### (11) OBESITY CLASSES—OR “SLIM-INS”:

Since it is recognised that ‘over weight’ is a health hazard, and there is considerable interest in the community in this subject, a number of groups have been started in several areas of the city, in the centres, with health visitors as group leaders. The sessions are held weekly, usually in the evening and are considered health education ventures. Attendances at individual groups have ranged from 50-70 per session and an encouraging number have completed the course which usually runs for 8-10 weeks. Those who expected a magic, effortless weight loss soon dropped out but most of the original attenders persevered. It is recognised by all concerned with these groups that it is difficult to lose weight without the support that is derived from involvement with others who have the same problem.

#### (12) FAMILY PLANNING:

A new clinic was opened in the Marsh Lane, Erdington personal and child health centre, and a new session at Poplar Road, Kings Heath.

An I.U.C.D. session was opened at Greet personal and child health centre in addition to the existing normal birth control session, and, by the end of 1971, plans were in hand for opening a second general (non I.U.C.D.) session at Erdington and appointing second doctors at both Ladywood and Maypole health centres.

In January 1971, a Vasectomy clinic was opened at Edgbaston Clinic (Frederick Road), with one session a week. This was increased to two weekly sessions in June. 233 operations were performed during the year.

## Statistics (figures for 1970 in brackets)

Total number of new patients	.. .. .	7,486	(6,747)
Total number of clinic sessions	.. .. .	2,384	(2,283)
Total number of doctor sessions	.. .. .	3,950	(3,739)
Total number of attendances at Local Authority premises	.. .. .	48,026	(44,184)
Total number of attendances at Edgbaston	..	18,109	(18,867)
Total number of attendances at Dudley Road Hospital	.. .. .	401	(56)
(Clinic opened September, 1970)			
Grand total of attendances	.. .. .	66,536	(63,051)
Total number of clinic sessions at Local Authority premises	.. .. .	1,637	(1,556)
Total number of doctor sessions at Local Authority premises	.. .. .	2,733	(2,438)
Total number of clinic sessions at Dudley Road Hospital	.. .. .	49	(25)
Total number of doctor sessions at Dudley Road Hospital	.. .. .	49	(15)

## Domiciliary Visiting Service

533 new patients were registered during the year, a 14 per cent increase over 1970.

A total of 1,301 doctor and 5,095 nurse visits were made to 1,299 patients (this includes 278 doctor visits and 962 nurse visits where it was not possible, for various reasons, to see the patient, as this did take up professional time).

During the year visits were discontinued to 421 patients, for various reasons, viz; rehoused outside the Local Authority area, lost trace, sterilization, satisfactorily established on a method for a considerable period and no longer needing supervision, transferred to a clinic etc.

Sometimes, however, through the co-operation of health visitors, 'lost trace' patients are referred again.

Due to the increasing use of this service it has been necessary to increase the number of doctors and nurses.

## STATISTICS

### Child Health Clinics

(1) PERCENTAGE OF CHILDREN VISITED IN THEIR OWN HOMES WHO  
ATTENDED CHILD HEALTH CLINICS

<i>Year</i>			<i>0-12 months</i>	<i>1 year</i>	<i>2 years</i>	<i>3 years</i>	<i>4 years</i>
1969	..	..	66.2	54.9	27.6	17.7	12.2
1970	..	..	67.4	56.2	27.9	18.8	13.7
1971	..	..	68.2	58.4	29.7	19.5	14.7

(2) FREQUENCY OF ATTENDANCES AS A PERCENTAGE OF ATTENDERS  
IN EACH AGE GROUP

<i>Children who made</i>	<i>0-12 months</i>			<i>1 year</i>			<i>2-5 years</i>		
	<i>1969</i>	<i>1970</i>	<i>1971</i>	<i>1969</i>	<i>1970</i>	<i>1971</i>	<i>1969</i>	<i>1970</i>	<i>1971</i>
1-5 attendances ..	70.3	71.7	71.9	75.4	76.4	74.8	96.1	96.4	95.7
6 or more attendances ..	29.7	28.3	28.1	24.6	23.6	25.2	3.9	3.6	4.3

(3) CHILDREN'S CONSULTATION CLINICS  
(BIRTH TO 5 YEARS)

Number of Clinics held:	..	..	..	..	..	<i>1970</i>	<i>1971</i>
(a) With doctor in attendance	..	..	..	..	..	2,506	2,342
(b) Without doctor in attendance	..	..	..	..	..	1,858	2,133
New children attending	..	..	..	..	..	11,971	12,077
Total attendances	..	..	..	..	..	86,591	87,405
Average attendance per clinic	..	..	..	..	..	19.8	19.5
Total number examined by doctor	..	..	..	..	..	28,377	26,498
Average number examined by doctor per session	..	..	..	..	..	11.3	11.3
Children referred elsewhere	..	..	..	..	..	952	1,090

(4) ANTENATAL AND CHILDREN'S COMBINED CLINICS—CHILDREN  
ATTENDING

Number of combined clinics:		<i>1970</i>	<i>1971</i>
(a) With doctor in attendance .. .. .		1,462	1,322
(b) Without doctor in attendance .. .. .		442	432
New children attending .. .. .		3,348	3,561
Total attendances .. .. .		27,299	28,133
Average attendance per clinic .. .. .		14.3	16.0
Total number examined by doctor .. .. .		14,319	13,969
Average number examined by doctor per session .. .. .		9.8	10.5
Mothers who attended health talks .. .. .		238	404

(During these sessions 108 examinations of expectant mothers were made and 2,125 blood specimens taken in 1971).

(5) CONSULTATION CLINICS WITH GENERAL PRACTITIONERS

(a) at Centres:

(1) Individual children attending:		<i>1970</i>	<i>1971</i>
Under 1 year .. .. .		1,049	806
1 year .. .. .		1,142	1,132
2-5 years .. .. .		1,350	1,146
(2) Total number of attendances .. .. .		16,594	15,206
Number of children examined by general practitioners .. .. .		8,140	6,563
Seen by health visitors only .. .. .		6,246	6,220
Attendances for immunisation .. .. .		8,565	7,994
Attendances at health talks given by health visitors .. .. .		1,907	1,584
Total number of sessions held .. .. .			2,169

Antenatal

Total examinations of mothers .. .. .		18,576	17,098
New mothers registered .. .. .		2,823	2,515
No. of mothers having blood tests taken .. .. .		1,984	1,861

Postnatal:

Primary postnatal examinations .. .. .		1,451	1,334
Re-examinations .. .. .		37	76
Gynaecological examinations .. .. .		367	412



(b) At general practitioners' surgeries:

Total attendances:						1970	1971
Under 1 year	..	..	..	..	..	3,857	5,065
1 year	..	..	..	..	..	1,240	1,259
2-5 years	..	..	..	..	..	1,005	1,224
Over 5 years	..	..	..	..	..	45	52
Number examined by general practitioners						2,949	3,611
Seen by health visitors only						3,198	3,601
Attendances for immunisation						4,310	4,187
Attendances at health talks given by health visitors						1,745	591
Total number of sessions held							1,127

7,600

(6)

HANDICAPPED CHILDREN

The following table shows children notified during the year in accordance with the Education Act 1944, to the Local Education Authority as having important defects discovered either during the course of home visiting or at clinics:—

Category of Defects									No. of Cases
a.	Totally blind	..	..	..	..	..	..	..	2
b.	Partially sighted	..	..	..	..	..	..	..	12
c.	Totally deaf	..	..	..	..	..	..	..	5
d.	Partially deaf	..	..	..	..	..	..	..	12
e.	Educationally sub-normal (mentally backward)							..	116
f.	Epileptic	..	..	..	..	..	..	..	11
g.	Maladjusted (emotional instability or psychological disturbance)							..	7
h.	Physically handicapped	..	..	..	..	..	..	..	29
	Spastic condition	..	..	..	..	..	..	..	26
i.	Defective speech (not due to deafness)					..	..	..	4
j.	Delicate	..	..	..	..	..	..	..	139
(diabetes 3; Tuberculosis 24; Asthma 31; Haemophilia 1; Coeliac disease 8; Bronchiectasis 4; Congenital heart disease 19; other disorders 20)									
k.	No. of children with a combination of defects (included above)							..	20

(7)

## INCIDENCE OF ASTHMA

<i>Year of Birth</i>										<i>No. of children reported during 1971</i>
1966	..	..	..	..	..	..	..	..	..	7
1967	..	..	..	..	..	..	..	..	..	12
1968	..	..	..	..	..	..	..	..	..	8
1969	..	..	..	..	..	..	..	..	..	2
										—
										29
										==

(8)

## RELAXATION CLASSES

							<i>1970</i>	<i>1971</i>
Individual mothers attending	..	..	..	..	..	..	1,540	1,710
Sessions held (relaxation only)	..	..	..	..	..	..	1,496	1,472
Sessions held (combined with Remedial Exercises)	..	..	..	..	..	..	104	103
Total attendances	..	..	..	..	..	..	7,091	9,046
Attendances at associated Mothercraft classes	..	..	..	..	..	..	7,057	7,806

## CHIROPODY CLINICS FOR ANTENATAL CASES AND CHILDREN

Total sessions held	..	..	..	..	..	..	42	41
Total attendances	..	..	..	..	..	..	232	266
Average number of patients called per session	..	..	..	..	..	..	9.8	10
Average number of attendances per session	..	..	..	..	..	..	5.5	6.4

## ATTENDANCE FOR REMEDIAL EXERCISES

Individual children attending	..	..	..	..	..	..	124	111
Total attendances	..	..	..	..	..	..	566	653
Hearing Tests	..	..	..	..	..	..	8,787	8,847
Toddlers' Training Class—Attendances	..	..	..	..	..	..	13,843	14,518
Training Classes for Handicapped Children—Attendances	..	..	..	..	..	..	4,358	5,288
Exercises for the Elderly—Attendances	..	..	..	..	..	..	3,744	4,242
Number of Individual Interviews	..	..	..	..	..	..	20,214	23,164

# SUMMARY OF ATTENDANCES AT PERSONAL AND CHILD HEALTH CENTRES

<i>Clinic Attendances</i>		1970	1971	Increase	Decrease
<i>Total Individual Children Attended Centre</i>					
Percentage of visited children who attended centres					
	0-12 months	67.4	68.2	0.8	
	1 year	56.2	58.4	2.2	
	2 years	27.9	29.7	1.8	
	3 years	18.8	19.5	0.7	
	4 years	13.7	14.7	1.0	
<i>Frequency of attendance in age groups</i>					
(a) 1-5 attendances	0-12 months	71.7	71.9	0.2	
	1 year	76.4	74.8		1.6
	2-5 years	96.4	95.7		0.7
(b) 6 or more attendances	0-12 months	28.3	28.1		0.2
	1 year	23.6	25.2	1.6	
	2-5 years	3.6	4.3	0.7	
<i>Children's Consultation Clinics</i>					
Number held. 1. With Doctor .. ..		2,506	2,342		164
2. Without Doctor .. ..		1,858	2,133	275	
New children attending .. ..		11,971	12,077	106	
Total attendances .. ..		86,591	87,405	814	
Average attendance per clinic .. ..		19.8	19.5		0.3
Total examined by Doctor .. ..		28,377	26,498		1,879
Average seen by Doctor per clinic .. ..		11.3	11.3		
Children referred elsewhere .. ..		952	1,090	138	
<i>Antenatal and Children's Combined Clinics</i>					
Number held. 1. With Doctor .. ..		1,462	1,322		140
2. Without Doctor .. ..		442	432		10
New children attending .. ..		3,348	3,561	213	
Total attendances .. ..		27,299	28,133	834	
Average attendance per clinic .. ..		14.3	16.3	2	
Total number seen by Doctor .. ..		14,319	13,969		350
Average seen by Doctor per clinic .. ..		9.8	10.5	0.7	
Children referred elsewhere .. ..		952	Included above		
Health talks—No. of mothers .. ..		238	404	166	
<i>General Practitioner Clinics at Personal and Child Health Centres</i>					
Total attendances .. ..		16,594	15,206		1,388
No. of children examined by General Practitioner .. ..		8,140	6,563		1,577
Seen by Health Visitor only .. ..		6,246	6,220		26
Attendances for Immunisation .. ..		8,565	7,994		571
Attendances at health talks given by Health Visitors .. ..		1,907	1,584		323

# SUMMARY OF ATTENDANCES AT PERSONAL AND CHILD HEALTH CENTRES

<i>Clinic Attendances</i>	<i>1970</i>	<i>1971</i>	<i>Increase</i>	<i>Decrease</i>
<i>Antenatal and Post Natal Clinics</i>				
Local Authority:—				
1. No. combined with children .. ..	1,902	1,754		148
New expectant mothers registered .. ..	77	52		25
Total attendances .. ..	211	108		103
2. Antenatal clinics with midwives only ..	710	657		53
New expectant mothers .. ..	867	779		88
Total attendances .. ..	3,313	2,841		472
3. Primary post natal examinations .. ..	6	4		2
Total post natal examinations .. ..	7	5		2
4. Mothers attending for blood tests only ..	2,524	2,125		399

## SCREENING PROCEDURES

### 1. Cervical Cytology

Local Authority clinics at personal and child health centres continue to be poorly attended and there is no waiting list except at four centres in the City—Northfield, Acocks Green, Kings Heath and Wentworth Road. It is noted that these centres cater for a proportion of those in the higher income group. In the poorer areas of the City clinics have no waiting lists and are held at less frequent intervals. It is furthermore disappointing, when the hospitals are prepared to take an increasing number of slides for examination, that this branch of preventative medicine evokes a poor response from the public despite two publicity campaigns launched during the year.

Recalls of those who were originally screened in 1965/66 commenced during the year but the response was very poor and 17 per cent on an average of those recalled attended. With changes of address it is difficult to ensure that the appointments have actually reached patients. It is hoped that the National Recall Scheme beginning on 1st January 1972 will be somewhat more successful. Even with the simple local recall schemes the vast amount of clerical work involved pays a very poor dividend.

Grade Four and Five Smears (potentially cancerous and cancerous).

#### (a) Rate per 1,000 by age group

	<i>1971</i>	<i>1970</i>	<i>1969</i>	<i>1968</i>
20 – 30 years .. ..	0·7	1·2	0·6	1·8
31 – 40 years .. ..	3·1	3·3	1·7	3·3
51 – 60 years .. ..	3·0	3·6	3·9	4·9
61+ years .. ..	Too few smears taken for statistical significance.			

Overall rate per 1,000, 2·0.



Below are given the relevant statistical data by type of clinic:—

CERVICAL CYTOLOGY

	No. of smears taken	No. grade 4 or 5	Years 20-30 No. taken	No. grade 4 or 5	Years 31-40 No. taken	No. grade 4 or 5	Years 41-50 No. taken	No. grade 4 or 5	Years 51-60 No. taken	No. grade 4 or 5	Years 61+ No. taken	No. grade 4 or 5
Child Health Centres	1971 1970 1969	10 15 16	955 936 1,508	1 4 —	1,259 1,331 2,298	4 5 2	1,055 1,141 2,202	3 4 9	480 501 902	2 2 4	90 83 130	— — 1
Factories or commercial premises	1971 1970 1969	11 10 13	737 1,048 1,146	— — —	616 644 843	6 4 2	1,103 1,058 1,653	5 5 5	710 682 999	— 1 5	8 50 39	— — 1
*Family Planning	1971 1970 1969	5 9 7	4,185 4,889 3,533	3 4 4	1,611 1,959 1,373	2 4 2	480 602 412	— 1 1	26 37 16	— — —	1 2 1	— — —
General practitioners' surgeries	1971 1970 1969	175 Nil 292	97 — 77	— — —	48 — 93	— — —	22 — 72	— — 2	4 — 50	— — 1	4 — —	— — —
Totals	1971 1970 1969	13,603 15,099 17,452	5,974 6,873 6,264	4 8 4	3,534 3,934 4,607	12 13 8	2,660 2,801 4,339	8 10 17	1,220 1,220 1,967	2 3 10	103 135 170	— — 2

\*1971 112 forms did not have date of birth inserted  
1970 136 forms did not have date of birth inserted  
1969 105 forms did not have date of birth inserted

- (b) Aggregate for years 1967 - 1970 and rate per 1,000  
 20 - 30 years - 0.9 (19,116 smears)  
 31 - 40 years - 1.9 (12,075 smears)  
 41 - 50 years - 3.6 (9,800 smears)  
 51 - 60 years - 3.4 (4,407 smears)

## 2. Orthoptic Screening for Eye Defects

Orthoptists from Selly Oak Hospital carry out screening at immunisation clinics, day nurseries, well baby clinics and health centres on children under the age of five years. Either by arrangement with the general practitioner, or through the clinic medical officer with the permission of the general practitioner, a baby or infant with a suspected defect is referred to an ophthalmic out-patient department for final diagnosis.

(a) No. of children examined	..	..	..	..	..	7,295
Age 0 - 2 years	..	..	..	..	..	4,487
2 - 4 years	..	..	..	..	..	1,884
4 years +	..	..	..	..	..	924
Sex: Male	..	..	..	..	..	3,812
Female	..	..	..	..	..	3,483

### (b) Suspected defect

Amblyopia	..	..	..	3	Nystagmus	..	..	..	9
Blepharitis	..	..	..	10	Palsy	..	..	..	12
Blue sclera	..	..	..	1	Phoria	..	..	..	22
Cataract	..	..	..	2	Photophobia	..	..	..	4
Conjunctivitis	..	..	..	3	Ptosis	..	..	..	20
Dilated pupil	..	..	..	1	For refraction	..	..	..	1
Entropion	..	..	..	5	Styes	..	..	..	3
Epiphora	..	..	..	24	Unequal pupils	..	..	..	1
Hypermetropia	..	..	..	1	Squint	..	..	..	257
Myopia	..	..	..	1	No apparent defect	..	..	..	6,813

### (c) Incidence of abnormality

- (i) By race Of the 6,114 white children examined 315 (5.2%) were found to have one or more suspect defects.  
 Of the 1,181 coloured children examined, 57 (4.8%) were found to have one or more suspect defects.
- (ii) By age: 0-2 years 149 (3.3%) were found to have one or more suspect defects.  
 2-4 years 133 (7.1%) were found to have one or more suspect defects.  
 4+ years 90 (9.7%) were found to have one or more suspect defects. Overall incidence of squint — 3.5%

### 3. Screening for Deafness; Audiology Clinic

Health visitors and medical officers carried out 8,847 screening tests for deafness at personal and child health centres and 247 in the homes of children. Three hundred and thirty three children were referred to the special audiology clinic for further investigation where they were tested and examined by the audiology team.

Our thanks are due to Dr. G. B. Simon, consultant psychiatrist, at Lea Castle Hospital and to Mr. N. Crabtree, consultant ear, nose and throat surgeon, for their co-operation and their ever ready help and suggestions. One hundred and fifteen children were removed from the register on the 1st January 1971 so that the revised number at the beginning of the year was 178.

#### Work at the Audiology Clinic

New children referred for testing	..	..	..	..	333	
No. of children on register 1st January 1971	..	..	..	178	511	
Discharged .. .. .	..	..	..	320		
Under supervision at year end	..	..	..	191	511	

Of the total number of children seen the following referrals were made:—

To consultant in subnormality	..	..	..	..	..	..	35
To consultant otologist	..	..	..	..	..	..	81
To school health service	..	..	..	..	..	..	51
To speech therapist	..	..	..	..	..	..	103

### 4. Congenital Dislocation of the Hip

Barlow's test for congenital dislocation of the hip continues as a routine procedure. To maintain the skill of the midwives a yearly refresher course with a film and a talk is given. During the year 1972 it is hoped, as is advised, to repeat the test on the tenth day. The following figures show the results of the tests carried out in 1971:—

2,178 infants were tested by domiciliary midwives of which 45 gave a positive result and were referred for a further opinion. Ten were stillborn or died before testing and a further 57 were transferred to hospital before the test was carried out and were subsequently tested in hospital.

## 5. Screening for Abnormal Amino Acids

Blood is obtained by heel prick from all City babies from the eighth day for Scriver testing and forwarded to the Children's Hospital Bio-chemistry Department. Sorrento, Birmingham and St. Chad's Maternity Hospitals, together with the domiciliary midwives, participate in the scheme.

Results:	No. of babies tested	..	..	..	..	..	..	18,044
	Repeat tests	..	..	..	..	..	..	1,186
	(990 were repeated because of an abnormality in the amino acid pattern and the remaining 196 because of technique failure).							

Three hundred and ninety four babies with abnormal patterns on the first test were retested principally because of raised tyrosine levels. Of this number 46 babies showed abnormalities (seven with raised levels of methionine) and are being followed up at the metabolic clinic to assess on a long term basis whether there will be a developmental retardation. Four cases of hereditary inborn errors of metabolism were definitely diagnosed—one of phenylketonuria, one histidinaemia, and two prolanaemia.

## 6. Screening for Handicaps; Observation Register

### STIMULATION CLASSES

With the shortage of medical officers it is impossible to carry out a comprehensive programme of developmental assessment of babies and children who are on the observation register. To a certain extent this deficit is made good by the skills which the health visitors have acquired in carrying out these tests. For a considerable time an increasing proportion of the health visitor students' programme is devoted to this sphere. Furthermore with the growth of assessment centres at hospitals and the follow up by neonatal paediatricians of babies from intensive care units or babies with abnormalities, handicaps are being diagnosed at an early age. There is as well a growth in the provision of care and assessment centres and stimulation classes for the handicapped child both in hospital and at personal and child health centres.

A structure is now at last emerging whereby the child who has an impairment in the motor, intellectual, social and emotional spheres is being evaluated. After careful assessment a child should receive these **integrated** services which will enable him to minimise his disability and maximise his level of achievement. The cycle must be continuous. Modification of ability and performance demands a continuous re-valuation, an establishment of new goals and different methods of achieving them. Empiricism must be ruled out. There is still a gap in the early conditioning of the family for a realistic attitude towards disability.



Appropriate parent counselling should prepare them for goals which differ from those for children with intact nervous systems. The doctor who works with handicapped children learns how essential it is to deal with the child in the context of the family. By getting the parents to accept a slow learning child, he may give them more satisfaction and by lightening their unrealistic expectations and demands, enable the child to learn faster. At a time when most children are healthy, popular theories of behaviour are not relevant to the parents of a child affected with a disability. How are parents of a disabled child to know where sickness ends and disability begins? A second problem is that of relating to the medical or nursing establishment. Even the healthiest child is sometimes ill or will have routine checks or immunisation. Because of this most parents will have an opportunity to compare experiences and reactions. In contrast the handicapped child is usually treated within a medical centre with which neither the parents nor their friends will have had any previous contact. Accordingly the parents have no guide lines of action.

The training or stimulation classes for handicapped children outside hospital are of the utmost importance. However the lack of staff in all disciplines concerned is a major drawback. The mothers and families must be involved in two ways, directly with the stimulation group itself so that there is involvement, and indirectly by the mothers meeting together to deal with their common problem by verbalisation of their worries, and by discussion under the careful and possibly subdued leadership of a psychiatric social worker or an experienced health visitor. The stimulation team as apart from the assessment team should consist of a health visitor, physiotherapist, psychiatric social worker, nursery nurse with the regular attendance of a doctor skilled in developmental paediatrics and with a deep sensitive knowledge of human beings.

The observation register is still under review as it is hoped that working with the Department of Social Medicine at the University a comprehensive computerised system of statistics will be evolved.

### **Screening for Malformations**

The following is a list of notifications of congenital malformations for 1971 as used in a joint study by the Department of Social Medicine at Birmingham Medical School and the Public Health Department. For comparison purposes the numbers in brackets are of congenital abnormalities as notified by hospitals or domiciliary midwives under the scheme of the Department of Health and Social Security.

	<i>Children with one malformation</i>	<i>Children with two or more malformations</i>	<i>Total</i>
Number of children affected	311	44	355
Number of malformations:			
Mongolism	14	3	17 ( 14)
Neural tube defects	60	11	71 ( 45)
Hydrocephalus (without spina bifida)	10	4	14 ( 5)
Exomphalos	3	0	3 ( 5)
Oesophageal atresia, etc.	4	1	5 ( 3)
Gut obstruction	5	0	5 ( 0)
Imperforate anus	4	7	11 ( 3)
Renal agenesis	1	4	5 ( 0)
Hypospadias	9	3	12 ( 5)
Other genito-urinary- conditions	8	11	19 ( 23)
Clefts of lip and palate	19	6	25 ( 29)
Congenital heart disease (without mongolism)	30	12	42 ( 38)
Polydactyly	18	3	21 ( 21)
Syndactyly	12	4	16 ( 7)
Talipes (without other defects)	60	0	60 ( 57)
Unstable hip	13	2	15 ( 19)
Other limb defects	9	7	16 ( —)
Cataract	0	1	1 ( —)
Other eye defects	1	0	1 ( 2)
Accessory auricle	16	1	17 ( 4)
Other ear defects	1	7	8 ( 10)
Diaphragmatic hernia	5	6	11 ( 2)
Malformations other than above	9	19	28 ( 60)

This list only includes children with well established macroscopic abnormalities of structure attributable to faulty development and present at birth. 112 other children who were reported to be malformed have been excluded because the conditions reported did not meet these criteria.

# **PERSONAL & CHILD HEALTH DENTAL SERVICE**

## **REPORT OF CHIEF DENTAL OFFICER DENTAL TREATMENT OF EXPECTANT AND NURSING MOTHERS AND PRE-SCHOOL CHILDREN, 1971**

### **Introduction**

1971 is the first year when the Dental Services provided for expectant and nursing mothers and pre-school children and those provided for school children have been covered by a single report. The statistical information which is supplied to the Central Departments has been included at the end of this section. In this report it is intended to draw attention to certain aspects of particular interest, to expand and amplify the information supplied and to comment on one or two things which do not appear in the statistical return at all. It is hoped in this way to build up for the first time a comprehensive view of the whole situation as it affects dental treatment for the priority classes.

### **Staff**

During 1971 four newly qualified dental officers were appointed to whole-time posts. Unfortunately two of them found it necessary, for one reason or another, to resign later in the year. Despite this high rate of resignation it is felt to be worth while and in fact very necessary to encourage young dental surgeons to take posts in the service even if, in the long run, only a small proportion remain to make it their career. It does mean that the local authority service is at least discussed among students when they are deciding which branch of their profession to choose.

Quite a large proportion of our staff are dental surgeons working on a sessional basis and here again there have been changes, five having been appointed and six having left.

The overall picture in 1971 is that of a slightly increased number of sessions worked by dental officers during the year but of a substantial deterioration towards the end which looks like continuing in 1972.

The recruitment and retention of an adequate and experienced staff is fundamental to the provision of a satisfactory service. In Birmingham the situation is disquieting as the ratio of pupils to dental officers is approaching 8,000 to 1 compared with a national average of 5,600 to 1. Recruitment is influenced by many things, not the least of which is the fact that Birmingham is a large industrial city and as a consequence unattractive to many people.



It is therefore doubly necessary to make sure that conditions of service, remuneration, etc. are at least as good as, if not better than, other apparently more attractive areas. It is important that equipment in clinics is up to date and efficient and that, as far as possible, the clinics themselves are bright and cheerful places.

In Birmingham very substantial use is made of dental auxiliaries. These young ladies are doing excellent work and we were fortunate to be able to recruit an additional whole-time auxiliary in 1971 bringing the total up to eight.

It seems a great pity that it has not been considered expedient to set up additional training schools for this class of worker in addition to the one in London since, with their value becoming more fully appreciated by other authorities, it has proved to be impossible to fill all the available posts.

Dental hygienists are another type of ancillary worker who can help greatly to increase the effectiveness of dental officers by relieving them of certain types of clinical work. Here again there is difficulty in filling the available posts and one hygienist resigned during the year and it has proved impossible to replace her.

## **Fluoridation**

The improvement in children's teeth following the adjustment of the level of fluoride in the drinking water to 1 p.p.m. in late 1964 has continued. The results for the teeth of children aged 5 in the survey carried out in the autumn of 1970 are shown in Figures 1 and 2. Figure 1 shows the improvement in mean d.e.f. count and Figure 2 demonstrates the marked decrease in the proportion of children with 10 or more defective teeth. As far as the deciduous teeth are concerned it can safely be said that the improvement has been dramatic. The permanent teeth are showing a marginal improvement but it is as yet too soon to expect a marked reduction in caries.

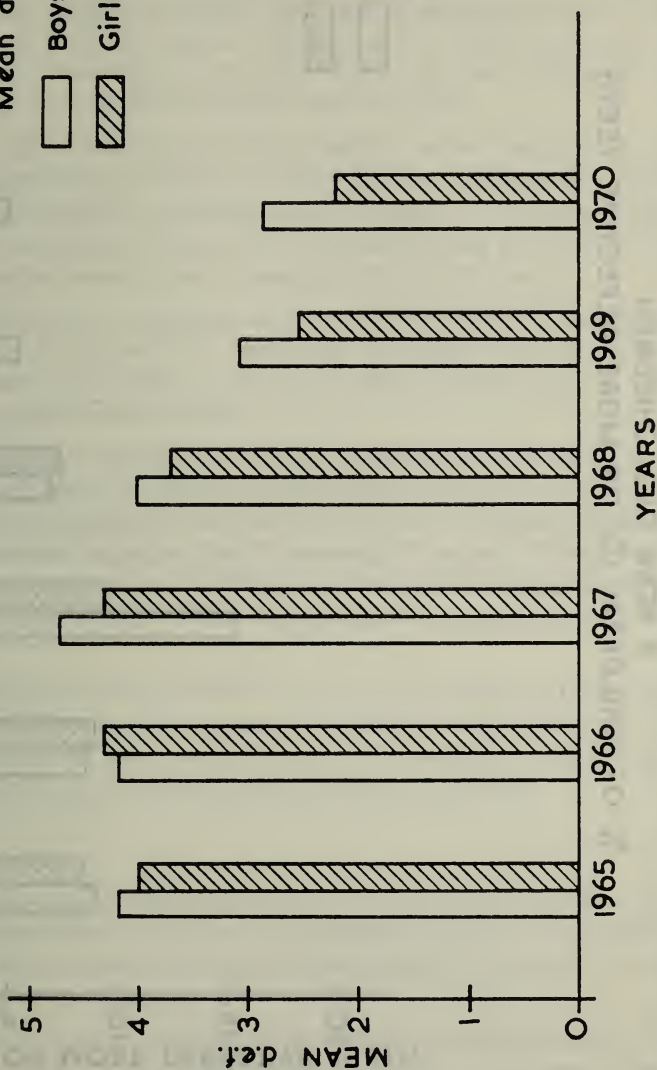
## **School Inspections**

At the beginning of 1971 there was a change in the system of carrying out school inspections. This involved taking record cards to the school so that they are available at the time of the inspection which had not previously been the case. This gives a great deal more information about the children and enables a much more accurate picture to be built up. In particular it enables steps to be taken to avoid friction with practitioners working in the General Dental Services.



# 5 YEAR OLD CHILDREN MEAN No. OF d.e.f. TEETH PER CHILD

Mean d.e.f 1970  
 Boys 2·893  
 Girls 2·127

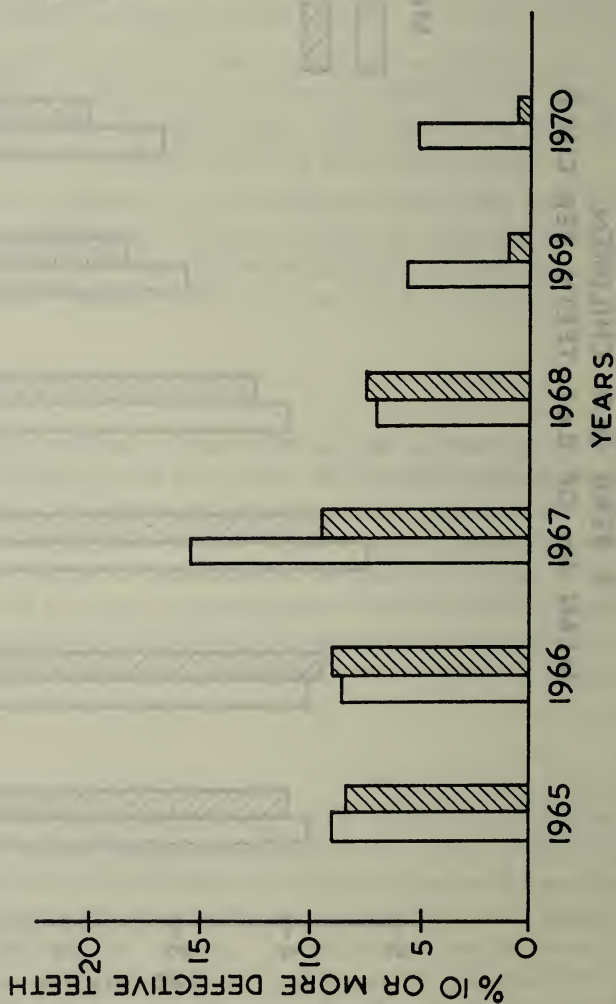


# 5 YEAR OLD CHILDREN % OF CHILDREN 10 OR MORE DEFECTIVE TEETH

% in 1970

Boys 5-7

Girls 5-7



The new system does however involve the dental surgery assistants in a great deal more work in preparing the cards prior to the inspection and of necessity it slows down the process of inspection, at any rate until experience has been gained in operating the new system. This has resulted in a decrease in children inspected although the number of sessions devoted to this type of work was exactly the same as in 1970. These new arrangements have thrown an extra burden on staffs at schools, particularly on school secretaries, in supplying up to date class lists etc. and our thanks are due to them for the very high degree of co-operation which has been received.

Since there is little point in inspecting children unless treatment can be offered in a reasonable space of time, the policy has been deliberately adopted of limiting school inspections to primary school children. It is hoped that it will be a practical proposition to make these children dentally fit and thereafter to provide only the incremental care to maintain them in this state.

These arrangements are supplemented by periodic re-call for children who are receiving either orthodontic or endodontic treatment, who have some medical history which puts them specially at risk, or show signs of being particularly susceptible to dental decay.

Although secondary schools are not being inspected this does not mean that treatment is not being provided for these children. Many are on a periodic re-call basis and it is explained at the end of a course of treatment that they can return for a further inspection and if necessary a course of treatment in from six to twelve months time. It is felt to be reasonable to allow secondary school children to bear a part of the responsibility for obtaining their own dental treatment.

The inspection of pre-school children at P. & C. H. centres and clinics and day nurseries has continued. The attendance of a dental surgeon at a P. & C. H. centre for this purpose is time consuming and the possibility of using other members of the dental team for this purpose is being looked into.

## **Treatment**

During 1971 the general trend has been to provide slightly less treatment for pre-school children and mothers and substantially more for school children. This picture may well be influenced by the falling need for treatment of young children as a result of fluoridation.

Overall there has been an increase in the number of fillings inserted from 48,229 in 1970 to 52,283 in 1971 coupled with a decline in the total number

of teeth extracted from 29,753 in 1970 to 27,222 in 1971. There has as a consequence been an improvement in the ratio of permanent teeth conserved to those extracted from 3·37 in 1970 to 3·84 in 1971. This represents an increase in the amount of work done which is substantially greater than the small increase in the number of sessions worked and represents a definite, if as yet small, improvement in the output of work per session.

## Orthodontics

The Orthodontic Department has been moved from Sheep Street to Lancaster Street and it has been possible to provide there an extra chair making three in all. These are housed in more convenient and attractive surroundings than was possible in Sheep Street.

As a result it is intended to increase the number of dental officers who are attending at the Orthodontic Clinic and working alongside the Orthodontic Specialists. It will take some time to realise the full potential of this situation but a start was made in the latter months of 1971. This arrangement is beneficial in several ways. It increases the number of orthodontic patients who can receive treatment. It also makes it possible for many of the routine visits when the services of a specialist are not required, to be made to peripheral clinics instead of travelling into Lancaster Street and it increases the experience and knowledge of the dental officers working in the service. Table I gives some indication of the work carried out by this section.

TABLE I

### ORTHODONTIC TREATMENT

	<i>Number</i>
Cases under treatment b/f from 1970 ..	1,002
New Cases 1971 .. .. .	367
Completed 1971 .. .. .	356
Discontinued 1971 .. .. .	77
Cases under treatment c/f to 1972 ..	936



## Dental Laboratory

The laboratory has also been moved from Sheep Street to Lancaster Street where it has been possible to redesign the layout in the light of past experience and to provide better and more convenient facilities.

Two technicians are employed although there is room for a third. They work mainly on the production of removable orthodontic appliances but they also produce a small number of dentures for school children. They have also the responsibility of producing crowns of various types, in particular for the endodontic specialist who is also working at Lancaster Street.

It is still necessary to send to outside laboratories, with whom we have had connections over many years, a certain amount of denture work and a number of orthodontic appliances. Table 2 gives details of the work of various types carried out by the dental laboratory in 1971.

TABLE II  
DENTAL LABORATORY  
DETAILS OF WORK UNDERTAKEN

Removable Orthodontic Appliances Completed	..	..	..	..	..	414
Fixed Orthodontic Appliances Completed	..	..	..	..	..	4
Orthodontic Appliances repaired	..	..	..	..	..	153
Record Models	..	..	..	..	..	70
No. of Dentures finished	..	..	..	..	..	77
No. of Repairs and additions to dentures	..	..	..	..	..	27
Acrylic Jacket Crowns	..	..	..	..	..	99
Gold Basket Crowns	..	..	..	..	..	26
Full Gold Crowns	..	..	..	..	..	—
Gold Reverse Retention Crowns	..	..	..	..	..	1
Splints	..	..	..	..	..	4
Post Crowns	..	..	..	..	..	3
Bridges	..	..	..	..	..	2
$\frac{3}{4}$ Gold Crowns	..	..	..	..	..	1
Gold Inlays	..	..	..	..	..	2

## Dental Health Education

Progress has continued in our efforts to include as many primary schools into the long term dental health education programme as possible and by the end of the year 95 schools were being visited on this basis.

Efforts in other directions have of course continued and dental health education for expectant mothers has been introduced into the Maternity Section at Dudley Road Hospital, into Selly Oak and Sorrento Hospitals and steps are being taken to include the Maternity Hospital at the Queen Elizabeth site. Talks have also been given to 30 mothercraft classes at Personal and Child Health Centres. Visits have been made to 17 play groups and the experiment is being tried of having a member of the dental staff available at intervals at P. & C. H. Centres when "Well Baby" clinics or other suitable clinics are being held. She can then talk to mothers with young children and put over the points that need to be made about dental health at a very early stage in the child's life so that much damage can be prevented. Talks have been given to nursery nurses in training and to the Health Visitors' Training Course by the Chief Dental Officer. We have also co-operated with the Dental Health Committee of the Central Counties Branch of the British Dental Association who, in co-operation with the Dental School and the Local Authority Dental Service, have provided evening programmes for teachers.

### **Accommodation**

The major change in 1971 in the sphere of accommodation has been the closing of the old established clinic at Sheep Street near the centre of the City where there were two surgeries for routine dentistry and two chairs for orthodontics together with a dental laboratory. These facilities have been transferred to the nearby clinic at Lancaster Street where it has been possible to provide an extra chair for orthodontic treatment. Transfer took place in September and by the end of the year the new arrangements appeared to be working reasonably smoothly.

A new dental clinic will shortly come into operation at Sparkbrook where it will be incorporated in a new health centre which is being erected on the site of Christ Church Hall. To enable this work to be carried out it has been necessary to vacate the Farm Road clinic which was adjacent to the site. A temporary clinic has therefore been brought into use in the P. & C. H. Centre building in Sampson Road but it has been possible to provide only one surgery instead of the two in the original clinic. It is intended that by the end of 1972 the new clinic, which will have three surgeries, will be in operation.

A further development has been the acquisition towards the end of 1971 of a mobile dental unit from the University of Birmingham, Department of Dental Health. It is intended to equip this vehicle as a dental surgery and in the first place to use it to provide treatment at certain special schools where

there are transport problems and also to provide treatment at ordinary schools which are some distance from a dental clinic or where facilities are otherwise inadequate. In this way it is hoped to be able to provide additional accommodation at small expense and at the same time to introduce into the service a certain amount of flexibility which will help in adapting to changing conditions. The fact that such a mobile surgery will be parked on the school premises should also help to reduce the time wasted through patients not keeping their appointments.

## **Equipment**

Much of the equipment in the dental clinics is approaching 20 years old and it is becoming difficult to get it serviced and to obtain spares. A comprehensive plan to replace most of this equipment over the next five years has therefore been drawn up and the first stage put into effect in the financial year commencing on 1st April, 1971. This has provided new equipment for one surgery at Lancaster Street, for one surgery at Church Lane Clinic with Warren Farm Road and Treaford Lane due to be dealt with early in 1972.

The equipment chosen is basically of two types. The first is a fully mobile unit for the dental surgeon together with an aspirator for use by the dental surgery assistant. The other type incorporates a fixed base which includes an aspirator but which has a bracket table including all items normally required by the dentist on the end of an arm which is adjustable in three planes. In either case up to date operating stools are provided for the use of the dental surgeon and the equipment can be used from either the standing position as preferred by the older members of the staff or the seated position as favoured by the younger members. In addition to these comprehensive re-equipments, electric aspirators have been provided at Ladywood Middleway, Carnegie and Yardley Green Road.

A certain amount of redeployment of X-ray sets has become possible and these have been made available at Nechells Green and Handsworth. In all X-ray facilities are now available at the following dental clinics:—Church Lane, Slade Road, Warren Farm Road, Soho Hill, Nechells Green, Treaford Lane, Aldridge Road, Harvey Road, Ladywood-Middleway, Maas Road and Lancaster Street.

## **Diploma in Dental Public Health**

This course, which was introduced in October, 1969, is particularly valuable for dental officers working in the Local Authority Services. Arrangements have

been finalized whereby one dental officer at a time can attend this course held in Birmingham under the In-Service Training Scheme arrangements. The first dental officer to do this commenced the course in October, 1970 and completed it in the summer of 1971, acquiring the Diploma in Dental Public Health of the Royal College of Surgeons. A second dental officer commenced the course in October, 1971.

## STATISTICS

### 1. Staff

Number of Officers in local authority service		Full time equivalent inclusive of extra paid sessions worked (to one place of decimals)			
Full time	Part time	Administra- tive Duties	Clinical duties		Total full time equivalent
			School Service	M. & C.W. Service	

#### (a) DENTAL OFFICERS

Principal School Dental Officer .. ..	1		0.5	0.3	0.2	1.0
Salaried Dental Officers	16		0.2	15.3	0.5	16.0
Sessional Dental Officers		20		5.7	0.6	6.3
Totals ..	17	20	0.7	21.3	1.3	23.3

#### (b) DENTAL AUXILIARIES AND HYGIENISTS

Dental Auxiliaries ..	7	1		7.1	0.5	7.6
Dental Hygienists ..	1			0.8	0.2	1.0



(c) OTHER STAFF

	<i>Number of Officers</i>	<i>Full time equivalent (one place of decimals)</i>
Dental Technicians .. .. .	2	2
Dental Surgery Assistants .. ..	49	42.7
Clerical Assistants .. .. .	3	3
Dental Health Education Personnel		

## 2. School Dental Clinics

	<i>Fixed Clinics</i>				<i>Mobile Clinics</i>		
	<i>No. with ONE surgery only</i>	<i>No. with TWO or more surgeries</i>	<i>Total number of surgeries</i>		<i>Total number of clinics</i>		<i>Total number of sessions worked in 1971</i>
			<i>Avail.</i>	<i>In Use</i>	<i>Avail.</i>	<i>In Use</i>	
Provided directly by the Authority	4	16	39	39			

## 3. Inspections

<i>Number of Pupils</i>			
	<i>Inspected</i>	<i>Requiring Treatment</i>	<i>Offered Treatment</i>
(a) First inspection—school ..	60,516	} 53,125	} 47,620
(b) First inspection—clinic ..	21,296		
(c) Re-inspection—school or clinic .. .. .	5,307	3,571	
Totals ..	87,119	56,696	47,620

*Note: Sections 4, 5 and 6 below include all work done by Dentists, Auxiliaries and Hygienists.*

#### 4. Visits

	<i>Ages 5-9</i>	<i>Ages 10-14</i>	<i>Ages 15 and over</i>	<i>Total</i>
First visit in the calendar year	10,633	10,740	2,480	23,853
Subsequent visits .. .. .	13,174	20,392	5,412	38,978
Total visits .. .. .	23,807	31,132	7,892	62,831

#### 5. Courses of Treatment

Additional courses commenced	778	900	230	1,908
Total courses commenced ..	11,411	11,640	2,710	25,761
Courses completed .. .. .	—	—	—	22,112

#### 6. Treatment

Fillings in permanent teeth ..	8,651	21,882	7,033	37,566
Fillings in deciduous teeth ..	10,567	1,071	—	11,638

Permanent teeth filled .. ..	7,020	17,695	6,211	30,926
Deciduous teeth filled .. ..	9,416	931	—	10,347

Permanent teeth extracted ..	1,045	5,226	1,396	7,667
Deciduous teeth extracted ..	13,026	4,804	—	17,830

Number of general anaesthetics	5,081	3,137	493	8,711
--------------------------------	-------	-------	-----	-------

Number of emergencies ..	1,618	1,100	207	2,925
--------------------------	-------	-------	-----	-------

Number of pupils X-rayed	..	..	..	1,801
Prophylaxis	..	..	..	5,892
Teeth otherwise conserved	..	..	..	1,773
Teeth root filled	..	..	..	130
Inlays	..	..	..	8
Crowns	..	..	..	166

## 7. Orthodontics

New cases commenced during the year	..	367	} Include cases treated by appliance only.
Cases completed during the year	..	356	
Cases discontinued during the year	..	77	
Number of removable appliances fitted	..	689	
Number of fixed appliances fitted	..	6	
Number of pupils referred to hospital consultants		8	

## 8. Dentures

Number of pupils fitted with dentures for the first time:—	<i>Ages 5-9</i>	<i>Ages 10-14</i>	<i>Ages 15 and over</i>	<i>Total</i>
(a) with full denture .. ..	1	3	4	8
(b) with other dentures ..	2	47	34	83
Total ..	3	50	38	91
Number of dentures supplied (first or subsequent time) ..	4	50	45	99

## 9. Anaesthetics

Number of general anaesthetics administered by Dental Officers ..

320

## 10. Sessions

	Adminis- trative sessions	Number of clinical sessions worked in the year					Total sessions
		School Service			P. & C. H. Service		
		Inspec- tion at School	Treat- ment	Dental Health Educa- tion	Treat- ment	Dental Health Educa- tion	
Dental Officers (Inc. P.S.D.O.)	336	577	9,689	25	435	4	11,066
Dental Auxiliaries ..	—	—	2,078	443	157	5	2,683
Dental Hygienists ..	—	—	238	418	3	85	744
Total ..	336	577	12,005	886	595	94	14,493

## DENTAL AUXILIARIES

### Visits

	<i>Ages 5-9</i>	<i>Ages 10-14</i>	<i>Ages 15 and over</i>	<i>Total</i>
First visit in the calendar year	1,361	720	133	2,214
Subsequent visits .. ..	3,751	2,195	475	6,421
Total visits ..	5,112	2,915	608	8,635



## Courses of Treatment

Additional courses commenced	77	41	12	130
Total courses commenced ..	1,438	761	145	2,344
Courses completed .. ..	—	—	—	2,016

## Treatment

Fillings in permanent teeth ..	2,093	3,205	762	6,060
Fillings in deciduous teeth ..	3,767	254	—	4,021
Permanent teeth filled ..	1,619	2,564	600	4,783
Deciduous teeth filled .. ..	3,276	204	—	3,480
Deciduous teeth extracted ..	242	128	—	370
Prophylaxis .. .. .	—	—	—	1,201

## DENTAL HYGIENISTS

### Visits

	<i>Ages 5-9</i>	<i>Ages 10-14</i>	<i>Ages 15 and over</i>	<i>Total</i>
First visit in the calendar year	26	99	24	149
Subsequent visits .. ..	109	251	78	438
Total visits ..	135	350	102	587

## Courses of Treatment Completed — 80

### Treatment

Prophylactic treatment ..	—	—	—	568
---------------------------	---	---	---	-----

# EXPECTANT AND NURSING MOTHERS AND CHILDREN UNDER FIVE YEARS

## *Part A. Attendances and Treatment*

Number of Visits for Treatment During Year	<i>Children 0-4 (inclusive)</i>	<i>Expectant and Nursing Mothers</i>
First Visit .. .. .	1,242	365
Subsequent Visits .. .. .	1,450	1,225
Total Visits .. .. .	2,692	1,590
Number of Additional Courses of Treatment other than the First Course commenced during year .. .. .	75	24
Treatment provided during the year—Number of Fillings .. .. .	2,338	765
Teeth Filled .. .. .	2,031	679
Teeth Extracted .. .. .	945	711
General Anaesthetics Given .. .. .	389	71
Emergency Visits by Patients .. .. .	91	28
Patients X-rayed .. .. .	10	33
Patients Treated by Scaling and/or Removal of Stains from the teeth (Prophylaxis) .. .. .	300	237
Teeth otherwise Conserved .. .. .	241	—
Teeth Root Filled .. .. .	—	3
Inlays .. .. .	—	2
Crowns .. .. .	—	6
Number of Courses of Treatment Completed during the year .. .. .	871	165

## *Part B. Prosthetics*

	<i>Children 0-4 (inclusive)</i>	<i>Expectant and Nursing Mothers</i>
Patients supplied with full upper or full lower (First Time) .. .. .	NIL	59
Patients Supplied with Other Dentures .. .. .	NIL	60
Number of Dentures Supplied .. .. .	NIL	160

**Part C. Anaesthetics**

General Anaesthetics Administered by Dental Officers

5

**Part D. Inspections**

	<i>Children 0-4 (inclusive)</i>	<i>Expectant and Nursing Mothers</i>
Number of Patients given First Inspections during year .. .. .	3,144	406
Number of Patients in A and D above who required treatment .. .. .	1,408	384
Number of patients in B and E above who were offered treatment .. .. .	1,374	379
Number of Patients re-inspected during year	151	8

**Part E. Sessions**

Number of Dental Officer Sessions (i.e. Equivalent Complete Half-Days) Devoted to P, & C. H. Patients:	For Treatment ..	595 <sup>3</sup> / <sub>4</sub>
	For Health Education	94 <sup>1</sup> / <sub>2</sub>

## DOMICILIARY MIDWIFERY

(Section 23—National Health Service Act, 1946)

There were 16,950 live births and 241 stillbirths to residents of Birmingham in 1971. Of these 462 live births and four stillbirths occurred outside the City. There were 3,310 out of city mothers confined at city hospitals, including Marston Green, amounting to approximately twenty per cent of all deliveries at city hospitals.

The total confinements of city mothers at 16,983 has shown a dramatic fall from the peak figure of 22,188 in 1964. The three peak years for confinements of City mothers, 1963 to 1965 inclusive, gave an aggregate of 65,194 confinements as compared to an aggregate of 54,194 for the years 1969 to 1971 inclusive. It is predicted that the number of births nationwide will continue to fall for a further three years, though not quite so rapidly, and there is no reason to believe that the City's experience will be different.

The succeeding text and statistical tables refer only to confinements of City mothers.

	(1) <i>Total No. of con- finements at hospitals mother and baby homes and at home</i>	(2) <i>Total No. of con- finements at hospitals and mother and baby homes</i>	(3) <i>Total No. of domiciliary confinement</i>	(4) <i>Total No. of early discharges needing attention of midwife</i>	(5) <i>Hospital confinement as percentage of total</i>	(6) <i>(3) and (4) as percentage of (1)</i>
1964	22,188	15,006	7,082	11,992	68.1	86
1965	21,156	15,017	6,139	12,624	71.0	89
1966	20,519	14,929	5,590	12,937	72.4	90
1967	20,724	15,414	5,310	13,207	74.4	89
1968	20,342	15,576	4,766	12,308	76.6	84
1969	19,035	15,440	3,595	12,536	81.1	85
1970	18,176	15,355	2,821	13,632	84.5	90
1971	16,983	14,835	2,148	12,777	87.4	88

During the year 14,835 city mothers were delivered at hospitals or mother and baby homes, a decrease of 520 on the figure for 1970. Domiciliary confinements have fallen to 2,148, however, if deliveries at general practitioner hospital units are included together with deliveries at nursing homes, the total amounts to 3,405.



## Perinatal Mortality Rate, 1971

The following are the city rates for the past seven years. Rates in brackets refer to England and Wales.

		1965	1966	1967	1968	1969	1970	1971
Perinatal mortality rate	..	29·63 (26·9)	29·27 (26·3)	28·29 (25·4)	26·23 (24·7)	25·65 (23·4)	27·50 (23·5)	24·90
Stillbirth rate	.. .. .	17·2 (15·8)	17·3 (15·3)	16·27 (14·8)	14·11 (14·3)	13·50 (13·1)	13·91 (12·9)	14·02
Early neonatal death rate	..	12·53	12·18	12·21	12·09	12·32	13·76	11·03
Percentage hospital delivery	..	71·0	72·4	74·4	76·6	81·1	84·5	88·0

It is a pleasure to record that the perinatal mortality rate with one of its components the early neonatal death rate is the lowest reached in the City's history and is a reflection of excellent care given by midwives, health visitors, general practitioners and hospital doctors. The perinatal mortality rate is an accurate index of the care given to expectant and nursing mothers. It is very much influenced by a number of factors—the quality of medical and nursing care, environmental circumstances, hospitalisation, the health and intelligence of parents, the number of children within a family, the time interval between the birth of each child etc. yet it would be complacent to accept these relatively low rates, as there is room for improvement. A continuous medical survey is carried out in the City on each of the immigrant groups of expectant and nursing mothers and their children. Consistently there is higher perinatal mortality and infant death rate among the immigrant communities. Statistics bear witness to these facts.

	Year	Both parents British	Both parents Irish	Both parents Caribbean	Both parents Asian
Perinatal mortality rate	..				
	1966	21·36	29·68	33·10	34·03
	1967	21·32 } av.	27·95 } av.	31·54 } av.	34·02 } av.
	1968	18·58 } 20·78	30·32 } 27·34	22·14 } 29·00	34·24 } 32·68
	1969	21·87	21·42	29·25	28·44
Infant mortality rate	..				
	1966	16·22	24·98	24·40	24·54
	1967	15·28 } av.	21·05 } av.	23·19 } av.	27·63 } av.
	1968	17·39 } 16·12	25·97 } 22·25	22·44 } 23·51	34·36 } 29·19
	1969	15·59	17·00	24·01	30·26

There is a slow decline most marked in the English and Irish groups, both in perinatal and infant mortality rates. Preliminary rates for 1970 (not as yet fully adjusted) show the same decline. One could attempt various explanations of these differences in mortality rates between the races—environment and culture are probably paramount. However if one looks at hospital admissions for confinement and antenatal care, both the Caribbean population and the Asian population have a much higher hospital admission and antenatal care rate than the other two groups. Yet other causes must be probed. About 9·5 per cent of all Asian births are below a birthweight of 5 lbs as compared to other ethnic groups where the 5 lb birth weight occurrence is about 4·3 per cent. In studies by Bonham in New Zealand amongst the Maori people he demonstrated that as the Maoris come to live in a better environment in the urban areas the perinatal and neonatal death rates fall and the birth weight of babies born to Maori women increases.

### Early discharges from Hospital

The following table gives the number of early discharges, together with the percentage of discharges from the ninth day and under in three day periods:-

Day of Discharge	1967	1968	1969	1970	1971
First ..	59	50	36	40	36
Second ..	847 } 20%	596 } 19%	641 } 20%	589 } 21%	476 } 22%
Third ..	1,723	1,725	1,891	2,175	2,316
Fourth ..	795	852	916	993	958
Fifth ..	634 } 22%	553 } 20%	572 } 19%	617 } 22%	925 } 28%
Sixth ..	1,445	1,021	824	1,465	1,680
Seventh	1,674	1,826	2,513	3,175	2,328
Eighth ..	4,973 } 58%	4,760 } 61%	4,263 } 61%	3,795 } 57%	3,306 } 50%
Ninth ..	1,047	934	880	783	752
	<hr/> 13,207	<hr/> 12,308	<hr/> 12,536	<hr/> 13,632	<hr/> 12,777
Ten days and over to the care of the midwife		819	918	1,000	1,022
					1,046

There has been an appreciable improvement in the percentage of discharges in the period 24 hours to six days.

## General Practitioner Co-operation

Co-operation of the midwifery service with general practitioners has been the policy for many years and 1972 will mark the 25th anniversary of domiciliary midwives working with general practitioners in their surgeries or in antenatal clinics at Personal and Child Health Centres. This co-operation has gone further and now 43 midwives have been attached by practice area rather than by district to general practitioners. In some instances this involves crossing the boundaries of other local authorities after consultation and with co-operation of neighbouring authorities. With so many patients now being delivered in hospital it becomes equally important for the same group of midwives to work with a group of practitioners at antenatal clinics so that a relationship grows between the general practitioner, midwife and patient.

## Bed Bureau and Emergency Lists

Applications to the bed bureau were 834 of which 43 were referred by social workers. The disposal was as follows:—

To hospital	..	..	..	..	..	..	..	537
Referred back to general practitioner	..	..	..					78
Booked by midwives	..	..	..	..	..	..	..	102
Emergencies (including 43 referred by social workers)	..							111
Left City	..	..	..	..	..	..	..	4
Miscarriages	..	..	..	..	..	..	..	2
								<hr/>
								834
								<hr/>

Of the 834 dealt with 366 were of immigrant origin.

## Training Courses and Community Training of Pupil Midwives

One supervisor and 22 midwives attended post graduate courses during the year. In service training is continued for all midwives through discussion, guest lectures and films. Domiciliary midwives attend study days arranged at local hospital maternity units. One midwife has been successful in obtaining the Midwife Teacher's Diploma and a further two midwives are attending the Advanced Midwifery and Clinical Teaching Course held at Sorrento Hospital. Three courses in community training have been held for C.M.B. Part II pupils.

## Emergency Maternity Service (Flying Squad)

During the year 42 calls were made on the Flying Squad, of which 9 were out-of-City. An analysis of the Birmingham cases from 1967 to 1971 is as follows:—

	1967	1968	1969	1970	1971
Retained placenta with or without haemorrhage .. ..	39	34	31	29	12
Haemorrhage - placenta expelled	19	14	20	7	8
Abortions .. .. .	7	9	7	4	3
Antepartum haemorrhage ..	3	12	13	8	1
Other causes .. .. .	8	10	9	8	9
	<u>76</u>	<u>79</u>	<u>80</u>	<u>56</u>	<u>33</u>

## Analgesia

Analgesia was administered by domiciliary midwives to patients as follows:—

<i>As midwives</i>	<i>No. of patients</i>	<i>With general practitioner present</i>	<i>No. of patients</i>
Gas and oxygen ..	505	Gas and oxygen .. ..	46
Pethidine .. ..	354	Pethidine .. .. .	37
Trilene .. .. .	51	Trilene .. .. .	4
Gas, oxygen and pethidine	514	Gas, oxygen and pethidine	77
Gas, oxygen and trilene ..	1	Gas, oxygen and trilene ..	—
Gas, oxygen, pethidine and trilene .. ..	—	Gas, oxygen, pethidine and trilene .. .. .	—
Pethidine and trilene ..	28	Pethidine and trilene ..	4

## Clinics in Local Authority Premises

	<i>Assistant M.O.H. attending</i>		<i>Midwife attending</i>		<i>General Practitioner attending</i>	
	<i>New cases</i>	<i>Attendances</i>	<i>New cases</i>	<i>Attendances</i>	<i>New cases</i>	<i>Attendances</i>
1966	315	1,537	2,528	7,856	2,884	16,372
1967	313	1,491	2,175	6,803	3,132	18,814
1968	232	1,069	1,787	5,698	3,058	19,123
1969	122	613	1,298	4,484	3,022	20,206
1970	77	211	867	3,313	2,823	18,576
1971	52	180	779	2,841	2,515	17,098



## Maternal Mortality

In 1971 there were three maternal deaths. The maternal mortality rate was 0·17 including one abortion and 0·12 excluding the abortion. This rate is the lowest recorded in the City.

There were no deaths on the district.

One of the maternal deaths was due to an abortion procured by artificial means. The following table gives information regarding the three deaths.

<i>No.</i>	<i>Age</i>	<i>Parity</i>	<i>Cause of Death</i>	<i>Remarks</i>
1	25	Primi-gravida	Haemorrhage. Ectopic pregnancy.	This girl could not have known she was pregnant and regarded the haemorrhage and attendant bleeding as a late but normal period. She was unmarried.
2	32	4	Bronchopneumonia due to dislocated cervical spine.	This Asian lady was very restless during labour and, while left for a few minutes, was discovered lying on the floor. In the late stages of pregnancy the ligaments of the body become softened and slack to allow of the child's birth. Unfortunately this woman dislocated her neck and died of bronchopneumonia two weeks after she was delivered of a live child.
3	23	3	Respiratory failure due to air embolism. Attempted self-induced abortion.	No evidence of any ante-natal care. The girl was dead on arrival at hospital after being found collapsed at home. She was unmarried.

## Statistics

### (1) ANTENATAL AND POSTNATAL CLINICS

#### (a) Local Authority Clinics

##### (1) Expectant mothers attending combined antenatal and children's clinics:-

New mothers attending	..	..	..	..	..	..	52
Total attendances	..	..	..	..	..	..	108

##### (2) Antenatal clinics with midwife only

New mothers attending	..	..	..	..	..	..	657
Total attendances	..	..	..	..	..	..	779
	..	..	..	..	..	..	2,841

##### (3) Primary postnatal examinations at clinics

Total postnatal examinations	..	..	..	..	..	..	4
	..	..	..	..	..	..	5

##### (4) Mothers attending for blood tests only

	..	..	..	..	..	..	2,125
--	----	----	----	----	----	----	-------

#### (b) General Practitioner Clinics at Centres

##### Antenatal:

New mothers attending	..	..	..	..	..	..	2,515
Total attendances	..	..	..	..	..	..	17,098
Blood tests taken	..	..	..	..	..	..	1,861

##### Postnatal:

Primary postnatal examinations	..	..	..	..	..	..	1,334
Re-examinations	..	..	..	..	..	..	76
Gynaecological examinations	..	..	..	..	..	..	412

### (2) PRACTISING MIDWIVES

During the year 1971, 383 midwives notified their intention to practise in the City:-

City domiciliary midwives	..	..	..	..	..	..	124
City domiciliary day midwives	..	..	..	..	..	..	22
Independent domiciliary midwives	..	..	..	..	..	..	2
Midwives in institutions	..	..	..	..	..	..	222
Midwives in private nursing homes	..	..	..	..	..	..	7
Private agencies' midwives..	..	..	..	..	..	..	6

### (3) NUMBER OF MIDWIVES CEASING TO PRACTISE IN THE CITY

Domiciliary midwives and day midwives who left the City in 1971	..	..	..	..	..	..	22
Independent domiciliary midwives ceasing to practise	..	..	..	..	..	..	1
Hospital midwives ceasing to practise	..	..	..	..	..	..	85
Midwives in nursing homes ceasing to practise	..	..	..	..	..	..	1

(3a) DOMICILIARY MIDWIVES IN ACTIVE PRACTICE

		No. in practice 31.12.70	Number retired during year	Number resigned during year	Transfers	New appoint- ments	No. in practice 31.12.71
<i>Employed by local authority</i>							
(1)	Midwives .. ..	112	4	13	1+ 3—	12	105
(2)	Day midwives ..	19	—	4	2+ 1—	3	19

During the year 127 pupil midwives completed their Part II midwifery training in the City. Thirty-nine pupils were placed by supervisors in outside authorities, namely:—Warley County Borough, Dudley County Borough and Warwickshire County Council.

In addition 15 pupil midwives commenced district training but they terminated their appointments before completion of course because of failure to pass qualifying Part 1 examination.

(3b) VISITS MADE BY DOMICILIARY MIDWIVES

Antenatal

Doctor booked .. ..	18,734
Midwife booked .. ..	582
Hospital booked .. ..	2,289
Investigations .. ..	9,298
Useless visits .. ..	9,797
Other visits .. ..	10,976
	<hr/>
	51,676

Postnatal

In own area	(a) Home delivery .. ..	23,229
	(b) Hospital delivery .. ..	49,924
		<hr/>
		73,153
In other midwives areas	(a) Home delivery .. ..	10,549
	(b) Hospital delivery .. ..	27,665
		<hr/>
		38,214
Visits by premature baby midwives .. ..		9,146
		<hr/>
	TOTAL	172,189

(3c)

## CLINICS ATTENDED BY DOMICILIARY MIDWIVES

(a)	At general practitioners' surgeries	.. .. .	4,181
	No. of patients seen	.. .. .	43,481
(b)	General practitioners at personal and child health centres	..	2,265
	No. of patients seen	.. .. .	25,826
(c)	Public health doctor at personal and child health centres	..	335
	With doctor - no. of patients seen	.. .. .	1,546
	Midwife only - no. of patients seen	.. .. .	553
(d)	Midwife only at personal and child health centres	.. .. .	783
	Doctors' bookings, - no. of patients seen	.. .. .	3,989
(e)	Relaxation classes	.. .. .	1,782
(f)	Mothercraft classes	.. .. .	493
(g)	Family planning clinics	.. .. .	40
	No. of patients seen	.. .. .	160
(h)	G.P. Unit Birmingham Maternity Hospital - no. of clinics	..	119
	Patients seen	..	2,058
	Total No. of antenatal and postnatal clinics attended	.. .. .	7,683
	Other clinics or relaxation classes	.. .. .	3,315
			<hr/>
		TOTAL CLINICS	.. 10,998
			<hr/>
	Total attendances	.. .. .	77,613

(3d)

## AMBULANCE SERVICE

Patients accompanied in ambulance	.. .. .	209
Hours away from district on ambulance duty	.. .. .	432

(4)

## CHEST RADIOGRAPHY OF ANTENATAL CASES 1971

*Number X-rayed (full-sized films)*

Child health centres	.. .. .	189
Sorrento Hospital antenatal clinic	.. .. .	1,419
		<hr/>
	TOTAL	.. 1,608
		<hr/>

*Analysis of Results*

(1)	Normal cases	.. .. .	1,572
(2)	Pulmonary tuberculosis:—		
	(a) Referred to Chest Clinic (for assessment and/or treatment)		9
	(b) Referred to family doctor only	.. .. .	—
	(c) No action necessary	.. .. .	10
			<hr/>
		TOTAL	.. 19
			<hr/>



(3) Non-tuberculous conditions:-	
(a) Referred to hospital or clinic .. .. .	5
(b) Referred to family doctor only .. .. .	9
(c) No action necessary .. .. .	1

<b>TOTAL</b> ..	<b>15</b>
-----------------	-----------

(4) Failed to attend .. .. .	2
------------------------------	---

(5) RELAXATION CLASSES

Number of weekly sessions held by physiotherapists .. .. .	5
Number of weekly sessions held by midwives .. .. .	13
Number of weekly sessions held by health visitors .. .. .	15
Number of physiotherapists and/or health visitors .. .. .	1
Number of weekly sessions held by midwives and/or health visitors	8
Individual mothers attending .. .. .	1,710
Booked for hospital confinement .. .. .	1,564
Booked for home confinement .. .. .	146
Sessions held .. .. .	1,472
Attendances at associated mothercraft sessions .. .. .	7,806
Total attendances .. .. .	9,046

(6) CHIROPODY CLINICS FOR ANTENATAL MOTHERS AND CHILDREN  
0-5 YEARS

Total sessions held .. .. .	41
Total attendances .. .. .	266
Average number of attendances per session .. .. .	6.4

(7) ANALYSIS OF DOMICILIARY CONFINEMENTS ATTENDED BY  
MIDWIVES IN THE HOME, AMBULANCE OR AT  
GENERAL PRACTITIONER HOSPITAL UNITS

1. (a) No. of deliveries booked by general practitioners and midwives ..	2,142
(b) No. of 1(a) attended by general practitioners at birth (including 36 deliveries of out of City mothers) .. .. .	169
2. No. of deliveries not booked by general practitioners but delivered by midwives .. .. .	42

Included in the above figures are 146 home confinements originally booked for hospital and a further 27 women were confined at home who had no antenatal care as far as is known or had made no arrangements for their confinement.

Domiciliary midwives delivered 1,250 women in general practitioner units as follows:—

Birmingham Maternity Hospital General Practitioner Unit .. ..	1,169
Good Hope Hospital .. .. .	63
Sorrento Hospital .. .. .	18

## Nursing Homes

There are three homes taking unsupported mothers that are supervised by the supervisor of midwives. Deliveries in these homes were:—

Lyncroft Salvation Army Mother and Baby Home	..	..	..	68
The Grange, 42 Park Hill	..	..	..	30
Woodville, Raddlebarn Road	..	..	..	17

The domiciliary midwives delivered 7 of these 115 cases.

### (8) REQUESTS FOR MEDICAL AID BY DOMICILIARY MIDWIVES UNDER C.M.B. RULES ANALYSED BY CAUSE

(a)	<i>Mothers</i>					<i>Doctor booked for antenatal and postnatal care</i>	<i>Doctor not booked</i>
1.	Antepartum haemorrhage	..	..	..	..	16	1
2.	Chest conditions	..	..	..	..	—	—
3.	Essential hypertension	..	..	..	..	2	—
4.	Hydramnios	..	..	..	..	—	—
5.	Malpresentation	..	..	..	..	20	7
6.	Multiple pregnancy	..	..	..	..	—	—
7.	Other antenatal conditions	..	..	..	..	13	5
8.	Poor general condition	..	..	..	..	4	—
9.	Toxaemia	..	..	..	..	6	2
10.	Urinary conditions	..	..	..	..	1	—
11.	Varicose veins..	..	..	..	..	—	—
12.	Difficult or prolonged labour	..	..	..	..	33	8
13.	Foetal distress	..	..	..	..	20	2
14.	Post partum haemorrhage	..	..	..	..	7	8
15.	Laceration of perineum	..	..	..	..	—	—
16.	Obstetric shock	..	..	..	..	—	—
17.	Premature labour	..	..	..	..	34	5
18.	Retained placenta	..	..	..	..	14	3
19.	Inflamed breast	..	..	..	..	1	1
20.	Other postnatal complications	..	..	..	..	39	21
21.	Pyrexia	..	..	..	..	22	6
22.	Thrombosis of leg veins	..	..	..	..	4	3
23.	Abortion	..	..	..	..	1	—
24.	Social conditions	..	..	..	..	2	1
TOTAL						239	73

(b)	<i>Children</i>					<i>Doctor booked for antenatal and postnatal care</i>	<i>Doctor not booked</i>
	25. Ophthalmia neonatorum .. .. .					41	5
	26. Premature birth and debility .. .. .					5	—
	27. Convulsions .. .. .					—	—
	28. Deformity or malformation .. .. .					6	1
	29. Jaundice .. .. .					5	1
	30. Umbilical inflammation .. .. .					—	3
	31. Inflamed breast .. .. .					—	—
	32. Skin eruption, pemphigus .. .. .					3	—
	33. Unsatisfactory .. .. .					49	14
	33a Gastro-enteritis .. .. .					—	—
	34. Asphyxia .. .. .					10	4
TOTAL						119	28

### DOMICILIARY CARE OF PREMATURE INFANTS

In 1971 there were 1,207 premature infants in the following categories—and a total of 1,203 was cared for by the eight premature baby midwives.

- Home confinement with baby care at home .. .. . 41  
Neonatal deaths 1  
Reason: (a) Intrapartum anoxia; (b) birth trauma
- Home confinement with subsequent admission to hospital .. .. . 53  
Neonatal deaths 7  
Reasons: prematurity and respiratory distress 3, extreme prematurity 2, septicaemia and prematurity 1, prematurity and cerebral haemorrhage 1
- Home confinement, not transferred to premature baby midwife or hospital .. .. . 4  
No neonatal deaths.
- Hospital delivery, after-care by premature baby midwife .. .. . 1,109

## HEALTH VISITING

### Section 24—National Health Service Act, 1946

There was the whole time equivalent of 126 health visitors in post at the end of 1971. The total number of 0-5 year old children known to the section was 80,208 and the average basic case load was 636 per health visitor. This shows a further drop in the child population since 1970 when the total case load stood at 82,792 but an increase on the individual health visitor's load, which was then 634. Visits to adults, other than for antenatal and postnatal purposes, have risen considerably from 5,181 in 1970 to 11,090 in 1971. This figure may be due in part to a more comprehensive weekly return worksheet used for the first time during the year, but also reflects the increasing breadth of work undertaken with patients of general practitioners.

### Refresher Courses and In-service Training

Twenty-five members of staff attended refresher courses arranged by the Health Visitors Association and the Royal College of Nursing. One health visitor has taken a Field Work Instructors' course, and two health visitors have been on a Middle Management course. One health visitor obtained the District Nursing Certificate. A psychiatric course was arranged in conjunction with the Regional Hospital Board, on which Birmingham was allocated twelve places, which were duly filled. Staff meetings were held at less frequent intervals due to difficulty in finding a suitable meeting place.

The staff continued their assistance with the training of students from various disciplines, particularly nurses from general, psychiatric and mental subnormality hospitals. These totalled 625. Additionally during the year a further 280 visitors were received at the centres.

Child management problems are referred to the health visitor. Other referrals include young unmarried girls who are pregnant and have consulted the doctor requesting an abortion. These girls needed to talk to someone at length about their problems. Discussion revealed that they did not want to have their pregnancy aborted but pressure from the putative father or relatives had precipitated their request. The elderly, particularly the housebound, take up a great deal of the health visitor's time. The home visiting of this group is very often in close consultation with the practice district nurses, care being taken to avoid duplication of visits.

Some of the attached health visitors are field work instructors and they find that their medical colleagues readily co-operate in the training of student health visitors, following their progress with interest.



During 1971, 53 individual practitioners were assisted by health visitors at clinics held in their surgeries. Additionally, assistance was given by health visitors and other Local Authority staff to 52 individual practitioners who held sessions in personal and child health centres.

## Programme of Work in Association with General Practitioners

### (1) Surgeries Attended

	<i>Antenatal</i>	<i>Children: Antenatal</i>	<i>Children</i>	<i>Geriatric</i>	<i>Total</i>
Weekly .. .. .	8	5	13	2	28
Fortnightly .. .. .	1	—	1	—	2
Monthly .. .. .	—	—	2	—	2
<b>TOTAL .. .. .</b>	<b>9</b>	<b>5</b>	<b>16</b>	<b>2</b>	<b>32</b>

### (2) Clinics in Personal and Child Health Centres

	<i>Antenatal</i>	<i>Children: Antenatal</i>	<i>Children</i>	<i>Total</i>
Weekly	24	6	5	35
Fortnightly	3	2	1	6
Monthly	—	3	3	6
<b>TOTAL</b>	<b>27</b>	<b>11</b>	<b>9</b>	<b>47</b>

## Health Visitors Training Course

Birmingham entered 21 students for training at the College of Commerce, Gosta Green in 1971. The following table shows the response and ultimate results of our advertisements for students in 1971.

Enquiries .. .. .	110
Applicants ineligible for training .. .. .	14
Failed College entrance test .. .. .	16
Passed College entrance test .. .. .	26
Failed subsequent interview .. .. .	Nil
Applications withdrawn .. .. .	15
Applications withdrawn following acceptance .. .. .	5
Application forms not returned and/or failure to attend for entrance test	34

## Housing Department Hostels

Visits have been made to the three hostels in the City on a regular basis during the year. No serious outbreak of infection has been reported. One hostel has been divided into family units which helps to minimise the risk of infection spreading, but also appears to result in families remaining for longer periods in the hostel. In another hostel the health visitor has found an increase in the number of unsupported mothers visited. The continued co-operation and support from the hostel staff assists the health visitors in carrying out their work with these families.

<i>HOSTELS</i>	<i>No. of children visited</i>	<i>No. of expectant mothers visited</i>	<i>No. of families visited</i>	<i>Total No. of visits to hostels</i>
112 Moseley Street, 12.    ..    ..	152	13	102	30
43 Trinity Road, 6.    ..    ..	30	3	16	48
306 Station Road, 33.    ..    ..	30	3	17	30
TOTALS    ..    ..    ..    ..	212	19	135	108

## Research Project

During the latter part of the year certain members of staff have taken part in a virological and social enquiry into Sudden Infant Deaths, for which a medical reason as to the cause of death cannot be given with certainty. Also involved in the survey are the City Coroner, hospital pathologists, histologists and virologists. The survey will continue for twelve months or more, the aim of all concerned being to endeavour to arrive at an explanation of these tragedies in an effort to prevent their future occurrence.

## Co-operation with General Practitioners

At the end of the year, the number of health visitors involved in full attachment schemes amounted to 23, working with 72 general practitioners. This considerable increase on the 1970 figures was due to the attachment of all staff in a pilot area of the City where re-organisation of the nursing services is being implemented.

Pattern of work arising from attachment to and liaison with general practitioners continues to bring patients of all age groups with a variety of problems to the health visitor for assistance. In one practice a considerable amount of

work has arisen since the recent legislation concerning handicapped persons, particularly in relation to the attendance allowance. The health visitor has endeavoured to ensure that those eligible have made application to the appropriate government department. These applications have to be supported by medical recommendation.

<i>Work of the Health Visitors in General Practitioners' Surgeries</i>	1970	1971	<i>Increase</i>	<i>Decrease</i>
No. of Clinics attended by health visitors ... ..	1,017	1,127	110	—
Total attendances of children ... ..	6,378	7,600	1,222	—
0-12 months ... ..	4,087	5,065	978	—
1 year ... ..	1,240	1,259	19	—
2- 5 years ... ..	1,006	1,224	218	—
Over 5 years ... ..	45	52	7	—
Examined by general practitioners ... ..	2,949	3,611	662	—
Seen by health visitors only ... ..	2,886	3,601	725	—
Seen by General Practitioner and Health visitor ...	543	388	—	155
Attendances for immunisation ... ..	4,310	4,187	—	123
Antenatal attendances ... ..	6,069	3,443	—	2,626
Postnatal attendances ... ..	247	259	12	—
Others adults seen ... ..	113	556	443	—
Attendances at health talks given by health visitors ... ..	1,745	591	—	1,154

Nevertheless there has been a large increase in the numbers of visits to adults, other than expectant and nursing mothers. In this group are included visits to parents with children of pre-school and school age who are in need of assistance with problems not necessarily arising as a result of being parents. Financial, housing and marital difficulties, however, occur in all sections of the community, irrespective of the state of parenthood. Families and individuals in difficulties have been helped by the health visitors themselves, or by referral to the appropriate agencies.

# SUMMARY OF VISITS BY HEALTH VISITORS 1970 AND 1971

<i>Home Visiting</i>					1970	1971	<i>Increase</i>	<i>Decrease</i>
No. of area health visitors ... ..					130.4	126	—	4.4
Case load of children under 5 years ... ..					634	636	2	—
<i>(a) Routine visits to children under 5 years</i>								
Primary visits ... ..					19,563	17,173	—	2,390
Routine visits 0-12 months ... ..					45,845	37,494	—	8,351
1 year ... ..					38,848	32,192	—	6,656
2- 5 years ... ..					85,825	73,512	—	12,313
TOTAL ... ..					190,081	160,371	—	29,710
<i>b) Special visits</i>								
0-12 months ... ..					6,919	7,505	586	—
1 year ... ..					2,883	4,203	1,320	—
2- 5 years ... ..					5,733	8,729	2,996	—
<i>(c) Visits to expectant mothers</i> ... ..					2,529	8,361	5,832	—
<i>(d) Postnatal visits, etc.</i>								
Postnatal ... ..					1,472	316		
Neonatal deaths ... ..					34			1,228
Stillbirths ... ..					38			
<i>(e) Miscellaneous visits :—</i>								
Domiciliary deaf screening - effective visits					326	247	—	79
Scabies ... ..					533	441	—	92
Domestic helps ... ..					13	397	384	—
Children of school age ... ..					2,793	4,428	1,635	—
Adults (other than AN and PN) ... ..					5,181	23,940*	18,759	—
Old people (women 65+: Men 65+) ... ..					4,650	5,758	1,108	—
Mentally disordered persons ... ..					742	268	—	474
Hospital follow-up (by area health visitors)					704	668	—	36
Infectious diseases (other than T.B.) ... ..					303	667	364	—
Tuberculosis visits by area health visitors					1,216		(Work returned to specialist teams)	
To general practitioners ... ..					449	972	523	—
Re insanitary conditions ... ..					94	*	—	—
Daily minders Pre-School Play Groups and Private Nurseries					2,851	4,503	1,652	—
<i>(f) Specialised work</i>								
Hospital follow-up visits by special visitors					1,940	1,274	—	666
GRAND TOTAL ... ..					231,603	217,055	—	14,445
TOTAL USELESS CALLS ... ..					50,209	48,752	—	1,457
<i>Hostels for the Homeless</i>								
No. of children visited ... ..					255	212	—	43
No. of expectant mothers visited ... ..					32	19	—	13
No. of families visited ... ..					170	135	—	35
Total visits paid to hostels ... ..					129	108	—	21

\*Changed annotation.



# HOME NURSING SERVICE

## Section 25—National Health Service Act 1946

### General Practitioner Attachment Scheme

This scheme has now been in operation over the whole city for a year. The policy of attaching pairs of nurses to groups of approximately four general practitioners continues, and in many cases this means that a state registered nurse who has taken district training works in partnership with a state enrolled nurse who is also district trained. Good liaison between these partnerships and the groups of doctors to whom they are attached is now seen to result in fuller use being made of the trained district nurses' special skills. Because more doctors fully understand the content of a district nurse's training, they are better able to select the most suitable cases for referral for the care of the trained district nurse.

The pattern of the district nurse's working day is altering. Whereas a few years ago all her time was spent in caring for the patient in his own home, her duties often being limited to routine nursing care and simple treatments, she may now spend part of her day treating ambulant patients in the doctor's surgery, where she may carry out tests and examinations at the doctor's request as well as giving treatment and injections. Such tests may be the taking of blood samples, cervical smears, recording haemoglobin levels, electrocardiograph, or simple tests such as taking blood pressure or testing urine. Domestic visits, still the most important aspect of her work, are now more likely to involve skilled nursing and need knowledge, good judgment and decision making for which a district nurse is trained.

Patients requiring less skilled nursing, however, are not overlooked. The number of home nursing attendants employed has increased, and an induction course is now held annually for new recruits to the service. This course includes services instruction in simple nursing procedures, as well as an introduction to the services which are available to the patients. Many more chronically sick and frail elderly patients now receive routine nursing care from a home nursing

attendant under the supervision of the district nursing sister who is attached to the patient's general practitioner. In some parts of the city, these home nursing attendants are included in the group attachment, or two group attachments may refer suitable cases to one home nursing attendant.

The following table shows the work undertaken on practice premises:—

	Vaccination and Immunisation	Blood samples	Tests	Treatments	Injections	Observation visits	Total
1966	421	90	318	554	909	506	2,798
1967	6,148	1,382	3,243	9,623	7,490	3,696	31,582
1968	13,691	2,416	4,905	16,760	10,538	4,717	53,027
1969	17,268	3,184	6,873	26,344	16,231	6,234	76,134
1970	22,022	3,190	7,954	30,103	20,731	7,060	91,060
1971	23,722	3,691	11,903	34,505	24,180	7,061	105,062

The total number of domiciliary visits for 1971 was 566,326 compared with 560,249 in 1970.

### Emergency Night Nursing Service

The night nursing service deals with emergency cases only. One permanent night nursing sister is on duty from Monday to Friday inclusive, and week-end cover is provided by two members of the day staff who take it in turns to man the night nursing service on Saturday and Sunday nights. General practitioners wishing to refer cases to the night nursing service do so through Ambulance Control: if the patient is too ill to be left alone, the night nursing sister can in turn call on the services of a night attendant who will stay in the house till morning.

The number of visits paid by the night nursing sister still increases yearly, as the following table shows:—

				1967	1968	1969	1970	1971
Cases	—	..	..	66	71	130	119	110
Visits	..	..	..	218	374	716	823	874
Night Attendants		..		20	13	15	13	6

## **Voluntary Organisations**

The Association of Friends of Home Nursing in Birmingham continues to give generous help to patients reported by the district nurses as being in need, or suffering hardship. Each of the eight district nursing centres has an emergency stock of bed linen and clothing provided by the Association. A sum of money is also held by each area superintendent and used to buy necessities, such as extra nourishment or fuel, where illness causes special hardship.

The members of the Birmingham Young Volunteers Trust have cleaned out and painted a disused store room in one of the district nursing centres, and the Association of Friends of Home Nursing has equipped it with emergency stores of tinned food, cutlery, cleaning materials, fuel, cooking utensils and a portable stove and lamp. Bedding and nursing equipment have been added. These stores are for immediate use if an elderly person is found ill in a cold house with no provision for heating the room or preparing a meal. Members of the Birmingham Young Volunteers Trust are prepared to go out at night if such cases are reported to them, collect the necessary stores from the district nursing centre and light a fire, cook food and provide what comfort they can until permanent arrangements can be made to meet the need.

The Marie Curie Memorial Foundation day and night nursing service continues to help cancer sufferers by providing nurses or night watchers who remain with the patient for two or three nights weekly, so that the relatives can rest knowing that the patient will be cared for. Care during the day is sometimes provided, but there is less demand for this. The welfare grant from the Foundation continues to provide gifts of extra nourishment, clothing or luxuries where these would be particularly appreciated.

During 1971 nine nurses were employed who paid 258 visits to 69 patients. The sum of £1,008·67 has been paid in salaries, insurance contributions and travelling expenses; £104·44 was paid from the welfare grant to provide material comforts. The sum of £187·40 was received in donations.

## **District Nurse Training**

The year 1971 saw the appointment of a second tutor to the district nurse training centre, in preparation for the implementation of the 1969 General



Nursing Council syllabus, which will mean that from 1972 a certain number of student nurses in hospital will spend twelve weeks of their training studying community nursing.

During the year 35 state registered nurses entered for the examination for the National Certificate of District Nursing and all were successful. Of the 35 students, four were seconded from the health visiting section and one from the school health section.

Fifteen state enrolled nurses, of whom one was seconded for training from Herefordshire, undertook the ten weeks' course of instruction in district nursing. Two from Coventry undertook the theoretical part of the training at the district nurse training centre. All but two passed the examination and one of these was successful on re-entry. The successful candidates were awarded the National District Nursing (E) certificate.

An in-service course was arranged for home nursing attendants, consisting of five morning sessions held at weekly intervals, and for those home nursing attendants who had previously attended courses there was a study day.

Twenty-three district nurses attended refresher courses and a further 42 attended two three day courses for practical work instructors arranged by the Queen's Institute of District Nursing.

Many district nurses accepted invitations to attend study half-days arranged by the teaching divisions of the four main hospital groups in Birmingham.

The first two pupil nurses to enter for the integrated course of general and district nurse training, based on Selly Oak Hospital and the Home Nursing Service, have spent eight weeks gaining practical district nursing experience.

### **Observation Visits on the District**

Two hundred and fourteen student nurses, 94 pupil nurses and five midwives accompanied district nurses on their rounds for a day or half-day session. Four groups of pupil nurses from the United Birmingham Hospitals, with an average of 13 in each group, spent four weeks on the district as part of their training.



## Staff

The following table shows the number of nursing staff in post on the 31st December, 1971, as compared with the 31st December, 1970.

	31st December 1970			31st December 1971		
	Full-time	Part-time	Total	Full-time	Part-time	Total
Principal Nursing Officer .. .. .	—	—	—	1	—	1
Superintendent .. . . .	1	—	1	—	—	—
Deputy Superintendent .. . . .	1	—	1	—	—	—
Principal District Community Nurse Tutor .. . . .	—	—	—	1	—	1
District Community Nurse Tutor .. . . .	1	—	1	1	—	1
Area Superintendents .. . . .	8	—	8	8	—	8
Assistant Superintendents .. . . .	1	—	1	1	—	1
Senior Nurses .. . . .	8	—	8	7	—	7
S.R.N.'s with district training .. . . .	98	5	103	97	4	101
S.R.N.'s without district training .. . . .	27	10	37	25	6	31
S.E.N.'s with district training .. . . .	41	6	47	48	3	51
S.E.N.'s without district training .. . . .	14	4	18	16	4	20
Student Nurses .. . . .	—	12	12	—	23	23
<b>TOTALS .. . . .</b>	<b>200</b>	<b>37</b>	<b>237</b>	<b>205</b>	<b>40</b>	<b>245</b>
Home Nursing Attendants .. . . .	33	—	33	45	—	45
Full-time nurses seconded to work in the Geriatric Section included in above .. . . .	6	—	6	7	—	7

## Children's Home Nursing Unit

The Children's Home Nursing Unit has continued its work with a staff of three nurses, who visit patients in all parts of the city. In some cases the district nurse attached to the child's general practitioner will care for a sick child, and in such a case the paediatric district nursing sisters are available to give advice and support if required. Many doctors, however, refer cases of childhood illness direct to the Children's Unit.

The special responsibilities of the Unit include the care of children discharged from hospital after an operation or medical treatment.

#### NEW CASES VISITED BY THE CHILDREN'S HOME NURSING UNIT

	1968	1969	1970	1971
Bronchitis and pneumonia .. .. .	255	196	99	121
Tonsillitis, otitis media, adenitis .. .. .	68	60	46	34
Abscesses, boils, skin lesions .. .. .	105	93	140	111
Gastro-intestinal conditions, enemas .. .. .	124	93	86	76
Infectious diseases .. .. .	61	47	46	21
Disease of the central nervous system .. .. .	12	20	20	2
Minor surgical (burns and scalds) .. .. .	11	14	12	13
Diabetes mellitus .. .. .	1	2	2	1
Pyrexia .. .. .	53	35	41	43
Other medical conditions .. .. .	113	72	72	103
Post-operative conditions .. .. .	36	28	64	45
Orthopaedic conditions .. .. .	4	4	3	2
Eye conditions .. .. .	1	1	—	3
	844	665	631	575

Total visits to old and new patients:—6,593

(Total visits in 1970 were 6,805)

### Statistics

#### (1) CASES NURSED BY THE HOME NURSING SERVICE (excluding Children's Nursing Unit)

##### (a) Number of patients attended in their homes

Cases on books, 1st January, 1971 .. .. .	4,715
New cases attended .. .. .	13,642
Total cases attended .. .. .	18,357

##### (b) Ages of patients

		Cases on books	
		1st January 1971	New Cases
Under 5 years .. .. .	57	575	
5-14 years .. .. .	41	411	
15-64 .. .. .	987	6,125	
65 years and over .. .. .	3,630	6,531	
		4,715	13,642

(c) Cases referred by						
General practitioners	..	..	..	..	..	9,145
Hospitals	..	..	..	..	..	4,150
Public Health Department	..	..	..	..	..	242
Transferred from other sources	..	..	..	..	..	105
						<hr/> 13,642 <hr/>

(2) CLASSIFICATION BY DISEASE OR DISORDER OF NEW CASES DEALT WITH BY THE HOME NURSING SERVICE

(a) Medical						
Arthritis	..	..	..	..	..	424
Respiratory conditions: bronchitis	..	..	..	..	..	483
pneumonia	..	..	..	..	..	111
Cardiac disease	..	..	..	..	..	448
Cerebral catastrophies	..	..	..	..	..	588
Diabetes	..	..	..	..	..	424
Malignant disease	..	..	..	..	..	861
Senility	..	..	..	..	..	587
Other medical conditions	..	..	..	..	..	3,490
Enemata	..	..	..	..	..	1,370
Mental illness	..	..	..	..	..	65
Mental subnormality	..	..	..	..	..	26
(b) Infectious disease						
Tuberculosis	..	..	..	..	..	82
Influenza	..	..	..	..	..	51
Whooping cough	..	..	..	..	..	3
Measles	..	..	..	..	..	6
Other notifiable disease	..	..	..	..	..	5
(c) Midwifery and Gynaecology						
Puerperal pyrexia	..	..	..	..	..	12
Antenatal complications	..	..	..	..	..	135
Postnatal complications	..	..	..	..	..	57
Miscarriages	..	..	..	..	..	15
Conditions requiring pessary renewals	..	..	..	..	..	5
(d) Surgical						
Cases discharged from hospital	..	..	..	..	..	2,888
Operations at home	..	..	..	..	..	38
Treatment to ulcerated legs	..	..	..	..	..	657
Other dressings	..	..	..	..	..	811
						<hr/> 13,642 <hr/>

(3) VISITS TO DOMICILIARY CASES, INCLUDING HOME NURSING ATTENDANT CASES

(a) Total visits to domiciliary cases including home nursing attendants' cases, but excluding the Childrens Home Nursing Unit .. .. . 622,483

Visits in connection with general practitioner attachment (non-nursing) .. .. . 7,061

Investigation visits .. .. . 2,097

---

631,641

(b) Supervisory and teaching visits paid by District Nursing Staff 1971.

Supervisory visits paid by superintendents .. .. . 1,543

Teaching visits paid by superintendents .. .. . 902

Supervisory visits paid by senior nurses .. .. . 763

Teaching visits paid by senior nurses .. .. . 515

---

TOTAL: .. .. . 3,723

---



## LOAN OF NURSING EQUIPMENT

### Section 28 National Health Service Act, 1946

There was an increase of 2,724 (12·3 per cent) in the number of articles on loan during 1971. Sick room equipment shows an increase of 11·2 per cent and special equipment 13·1 per cent on 1970.

The rota rest bed purchased in 1970 has proved to be effective and reliable and a further two similar beds have been provided at their homes for patients discharged from the Midland Spinal Injuries Unit, Oswestry.

The most marked increase has been the weekly delivery of supplies and collection of soiled liners for incontinence pants. This service was being used by 186 persons at 31st December 1971, compared with 95 at the end of 1970.

### LOAN OF NURSING EQUIPMENT 1969-1971

#### (a) Quantities of normal sickroom equipment on loan during:-

	1969	1970	1971
Air rings and cushions .. .. .	991	1,034	1,336
Back rests .. .. .	1,171	1,307	1,621
Bed pans .. .. .	1,586	1,470	1,396
Commodes .. .. .	3,870	3,920	4,063
Leg cradles .. .. .	921	994	1,248
Mackintosh sheets .. .. .	450	286	381
Sick feeders .. .. .	135	153	161
Urinals .. .. .	1,002	1,053	940
Miscellaneous items .. .. .	400	261	549
	<hr/>	<hr/>	<hr/>
	10,526	10,478	11,695
	<hr/>	<hr/>	<hr/>

(b) Quantities of special equipment on loan during:-

	1969	1970	1971
Bedsteads .. .. .	829	825	783
Self-operating tilting beds .. ..	3	4	5
Special mattresses .. .. .	420	455	596
Ripple beds (Anti-decubiti) .. ..	87	107	105
Fracture boards .. .. .	293	312	350
Lifting poles and chains .. .. .	361	381	387
Crutches—pairs .. .. .	217	245	154
Walking sticks .. .. .	2,028	2,197	2,552
Walking aids .. .. .	1,795	2,152	2,370
Geriatric chairs .. .. .	261	391	473
Lifting apparatus .. .. .	68	81	78
Wheel chairs .. .. .	2,002	2,149	2,298
Wheel chairs (self-propelling) .. ..	672	499	625
Enuresis units .. .. .	225	234	257
Bath aids .. .. .	762	912	1,296
Incontinence pants .. .. .	458	579	728
	<u>10,481</u>	<u>11,523</u>	<u>13,030</u>

DOMICILIARY LAUNDRY SERVICE

**Section 28 National Health Service Act, 1946**

During 1971 the number of applications for the loan and laundry of linen and for the provision of incontinence pads was 825, a decrease of 25 compared with 1970. A service was provided for more than 300 persons throughout the year causing an excessive demand on the transport facilities available. An incontinence pads service only was being provided for 24 persons on 31st December, 1970, the same number as at 31st December, 1969.

The usage of incontinence pads increased from 230,000 in 1970 to 260,000 during 1971. The weight of linen laundered in 1971 was 1 ton less at 82 tons.

	1969	1970	1971
Number of cases on books 1st January	311	312	321
New applications during year .. ..	812	850	825
<b>TOTAL ..</b>	<u>1123</u>	<u>1162</u>	<u>1146</u>
Cases removed from books during year	811	841	811
Number of cases on books 31st December	312	321	335

# ANALYSIS OF CASES 1971

1971 Quarter ending	Number of applications	Service discontinued			
		Died	Hospital	Other reasons	Total
31st March ..	235	91	61	84	236
30th June ..	171	78	45	55	178
30th September ..	190	82	43	71	196
31st December ..	229	83	57	61	201
	825	334	206	271	811

## LOAN OF FIREGUARDS

### Section 28 National Health Service Act, 1946

During 1971 the number of fireguards on loan increased from 1,791 at the 1st January to 2,073 at 31st December. The 313 guards 'returned' during the year included 141 where the persons could not be traced or the guards were unfit for further use.

This service is now considered to be more appropriately that of the Social Services Department and it is envisaged that transfer will take place before 1974.

### FIREGUARDS

			1969	1970	1971
Number of guards on loan 1st January .. ..	..	..	1,639	1,579	1,791
Number issued during year .. ..	..	..	560	636	595
			2,199	2,215	2,386
Number returned during year .. ..	..	..	620	424	313
Number of guards on loan 31st December .. ..	..	..	1,579	1,791	2,073

## AMBULANCE SERVICE

### Section 27—National Health Service Act, 1946

There was a further decrease in the number of patients carried in 1971, some 20,000 fewer being conveyed than in the previous year.

The directly provided service carried a greater proportion of the patients than in 1970, a considerable reduction having been made in the use of the supplementary services.

The grand total of patients conveyed by the Ambulance Service during 1971 was 471,851 compared with 491,772 in 1970.

The Hospital Removal Cases are shown in the following table:

#### HOSPITAL REMOVAL CASES

	1970	1971
Directly Provided Service .. .. .	385,939	384,297
Hospital Car Service .. .. .	14,278	12,625
Private Hire Cars .. .. .	64,510	48,914
	<u>464,727</u>	<u>445,836</u>

The trend in the number of cases conveyed by directly provided ambulances of the Removals Section of the Service over the past four years is illustrated:

Year	<i>Patients conveyed by directly provided ambulances of Hospital Removals Service</i>	<i>Comparison with previous year</i>	
		<i>Increase</i>	<i>Decrease</i>
1968	476,360	27,992	—
1969	424,804		51,556
1970	385,939		38,865
1971	384,297		1,642

Detailed statistics under various classifications are shown in the following table, which also gives comparative figures for the past five years.



## HOSPITAL REMOVAL AMBULANCES (Directly Provided)

### COMPARATIVE ANNUAL TOTALS OF CASES CARRIED ACCORDING TO CLASSIFICATION

<i>Analysis</i>	<i>1967</i>	<i>1968</i>	<i>1969</i>	<i>1970</i>	<i>1971</i>
Clinic cases .. ..	369,861	397,822	351,601	318,974	317,915
Admissions .. ..	32,239	33,640	33,924	33,428	32,375
Discharges .. ..	29,380	27,384	22,943	18,501	19,131
Transfers .. ..	8,051	8,913	7,993	7,537	7,603
Emergency Maternity					
Service .. ..	110	98	116	83	50
Maternity .. ..	8,202	8,038	7,819	7,096	6,627
Miscellaneous .. ..	525	465	408	320	596
	448,368	476,360	424,804	385,939	384,297

### TOTAL NUMBER OF PATIENTS DIVIDED INTO STRETCHER AND SITTING CASES

(Directly Provided Ambulances)

	<i>1967</i>	<i>1968</i>	<i>1969</i>	<i>1970</i>	<i>1971</i>
Stretcher Cases .. ..	112,222	111,847	103,347	101,282	108,147
Sitting Cases .. ..	336,146	364,513	321,457	284,657	276,150
TOTALS .. ..	448,368	476,360	424,804	385,939	384,297

Trends in this ratio over the past four years are shown:—

#### RATIO OF SITTING TO STRETCHER CASES

(Directly provided ambulances)

1968	3.25 : 1	1970	2.81 : 1
1969	3.11 : 1	1971	2.55 : 1

There was no appreciable variation in the classified analysis of the patients carried by the directly-provided ambulances during the year.

## Accident Ambulances

Nine ambulances based on two Ambulance Depots and six Fire Stations continued to provide cover for accidents and other emergencies.

There was a slight decrease in the number of calls and casualties carried by the Accident Section, the comparative figures being as follows:—

	1970	1971
Calls .. .. .	30,370	29,537
Casualties .. .. .	27,045	26,015

Under mutual assistance arrangements with neighbouring authorities, the Service provided accident ambulances in response to ten incidents outside the city boundary.

A detailed analysis of calls, classified injuries, hospitals to which casualties were conveyed and the number of fatalities, with comparative figures for the previous year, is shown in the following tables:—

### ACCIDENT AMBULANCE CALLS

#### LOCATION OF CALLS

	1970	1971
Street accidents involving vehicles .. .. .	4,218	4,014
Factory accidents .. .. .	954	791
Private houses .. .. .	13,568	14,030
Offices .. .. .	68	44
Shops and restaurants .. .. .	765	625
Outdoor (other than street accidents) .. .. .	5,219	4,785
Licensed premises .. .. .	739	789
Schools .. .. .	693	671
Cinemas and theatres .. .. .	51	47
Other premises .. .. .	3,664	3,270
False alarms (malicious) .. .. .	431	471
<b>TOTAL .. .. .</b>	<b>30,370</b>	<b>29,537</b>

# ACCIDENT AMBULANCE CASES 1971

## NUMBER OF PERSONS OF VARIOUS AGE GROUPS CARRIED IN ACCIDENT AMBULANCES DURING EACH HOUR OF THE DAY

Age Group	HOURS OF THE DAY																								Total
	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	Total
5 and under 5	59	30	29	19	8	10	12	42	46	62	109	152	201	179	179	193	193	200	180	151	137	100	97	98	2,486
6-10	26	9	4	11	4	4	5	12	53	49	57	73	110	139	117	158	204	145	138	109	79	53	43	35	1,637
11-15	28	13	3	9	11	6	9	17	50	36	76	121	138	147	134	123	153	117	86	91	78	101	101	41	1,689
16-20	192	132	104	50	30	29	30	78	111	89	105	112	145	137	141	177	156	165	129	135	124	179	313	387	3,250
21-25	204	118	121	70	44	27	31	54	78	61	100	101	110	110	126	163	153	136	102	87	86	110	183	327	2,702
26-30	108	87	76	47	34	29	23	37	52	50	58	80	86	82	86	117	93	74	80	72	81	85	133	207	1,877
31-35	88	65	44	27	18	24	19	43	39	54	58	64	73	67	88	79	69	80	67	71	71	78	108	170	1,564
36-40	77	44	35	28	12	24	17	41	52	50	57	67	63	54	82	70	84	68	60	55	61	60	82	155	1,398
41-45	67	31	32	10	15	16	19	34	43	48	47	67	65	55	73	89	75	65	51	53	51	67	76	116	1,265
46-50	66	24	27	14	12	12	16	53	46	51	53	62	65	69	81	94	64	73	56	58	60	64	89	95	1,304
51-55	34	30	21	17	14	11	16	48	37	50	48	70	69	54	92	69	60	61	51	48	43	52	65	75	1,135
56-60	43	21	22	16	8	14	22	34	46	59	52	73	83	81	106	64	75	75	60	52	54	63	80	71	1,274
61-65	27	19	23	13	12	19	27	37	58	55	66	91	94	74	80	105	56	80	57	45	48	69	51	52	1,258
66-70	27	14	19	17	5	16	10	23	33	38	58	79	95	72	76	78	50	54	47	42	36	35	63	33	1,020
Over 70	24	29	13	27	15	19	30	37	60	104	139	179	199	180	179	129	119	83	74	66	72	66	91	68	2,002
Unknown Age	5	9	5	3	4	3	3	4	6	6	2	4	8	9	7	7	5	13	3	4	3	10	18	13	154
TOTALS	1075	675	578	378	246	263	289	594	810	862	1085	1395	1604	1509	1647	1715	1609	1489	1241	1139	1084	1192	1593	1943	26,015



# CLASSIFICATION OF INJURIES TO PATIENTS CARRIED IN AMBULANCES

	1970	1971
Fractures .. .. .	1,940	1,839
Wounds .. .. .	5,756	6,149
Collapse, fits, strokes .. .. .	3,343	3,636
Abrasions and bruises .. .. .	1,437	1,441
Drowning .. .. .	6	3
Eye injuries .. .. .	81	44
Dislocations and sprains .. .. .	192	173
Hanging .. .. .	—	—
Concussion, shock .. .. .	825	1,019
Haemorrhage .. .. .	443	345
Scalds and burns .. .. .	503	429
Poisoning .. .. .	1,330	1,463
Not classified .. .. .	11,189	9,474
<b>TOTAL .. .. .</b>	<b>27,045</b>	<b>26,015</b>

## DESTINATION OF CASUALTIES

	1970	1971
Accident Hospital .. .. .	5,485	5,355
General Hospital .. .. .	7,487	7,121
Selly Oak Hospital .. .. .	4,648	4,332
Dudley Road Hospital .. .. .	4,607	4,419
East Birmingham Hospital .. .. .	3,424	3,367
Queen Elizabeth Hospital .. .. .	228	262
Other Hospitals .. .. .	1,068	1,020
Casualties actually carried in ambulances but not taken to hospital .. .. .	98	139
<b>TOTAL .. .. .</b>	<b>27,045</b>	<b>26,015</b>

## FATALITIES

	1970	1971
Number of persons found dead on arrival of ambulances	548	521



## METHOD OF TRANSMISSION OF CALLS

	1971
G.P.O. "999" System .. .. .	23,206
Police Information Room .. .. .	2,884
Exchange Telephone .. .. .	1,541
Private Wire Telephone .. .. .	31
Messenger .. .. .	124
Radio .. .. .	1,462
Observed by Ambulance Crew .. .. .	289
	<hr/> 29,537 <hr/>

### Ambulance Fleet

This was as follows:

Dual-purpose (Stretcher) Ambulances .. .. .	68
Sitting Case Ambulances .. .. .	27
Sitting Case Cars .. .. .	1
Ambulance Coach (30-seater) .. .. .	1
Ambulance Coaches (20-seater) .. .. .	6

### Conveyance of Patients by Rail

Wherever possible, long distance cases were conveyed on the ambulance/rail/ambulance basis. Some 354 cases were carried on this basis during the year as compared with 341 the previous year.

Service ambulances were provided at the request of other local health authorities to meet trains at New Street railway station and transport some 329 patients either to final destinations or to other trains to continue journeys.

### Organisation

The basic organisation of the Ambulance Service remained unaltered during the year. Discussions took place in the early part of the year with representatives of the Ambulancemen's Union on the introduction of a new duty rota for rotating shift-workers. Agreement was reached on a seven-group rota with the inclusion of a twenty-minute meal break. The effect of this was to reduce it from an eight- to a seven-group rota and to spread the availability of men evenly over twenty-four hours. This new rota was introduced on 18th April 1971 and has been of considerable benefit to the Ambulance Service.

Notification was received from the British Red Cross Society that they wished to relinquish responsibility for the administration of the Hospital Car Service at the end of September 1971 but that the St. John Ambulance Brigade had expressed their willingness to take over the administration of that Service. This was agreed and the Hospital Car Service was accordingly transferred to the St. John Ambulance Brigade with effect from 1st October 1971.

## Training

Training continued in Birmingham during the year under the auspices of the Local Government Training Board. This was carried out for ambulance personnel from Birmingham and other neighbouring authorities. The details of the courses held are as follows:—

	<i>Duration of Course</i>	<i>No. of Courses held</i>	<i>Numbers attending</i>	
			<i>Birming- ham</i>	<i>Other Authorities</i>
Recruits, initial training ..	6 weeks	3	9	67
Revisionary .. .. .	2 weeks	15	30	61

Because of changes in the policy towards training personnel with five years' service and over, one-day assessment courses were not held this year. In their place operational staff will be required to attend refresher courses of two weeks' duration every three years.

In addition, courses of Driving Instruction were continued and five new entrants were converted to full driving duties.

In conjunction with the Fire Brigade and the Police, exercises were held on unopened parts of the motorway from the Gravelly Hill to the Great Barr interchanges. The three Services exercised separately and also in co-operation with each other.

In May 1971 an Ambulance crew from Birmingham entered the National Association of Ambulance Officers' Annual Ambulance Aid Competition and gained first place. They went forward to final competition at Harrogate on 22nd August 1971 where they tied for first place with a team from Manchester. In order to produce a result the competition judges decided to recall the two Attendants and Manchester were granted the victory by one point as the result of an oral test.

An exercise was held at Elmdon Airport on 30th September 1971 when a large passenger carrying aircraft was available through the co-operation of the Airport Authority. Thirty casualties with various simulated injuries, were involved and valuable experience was gained in the co-operation required by the three services likely to be involved in such an incident. The Airport Fire Service were responsible for dealing with the initial fire and rescue procedures, the Birmingham Fire Brigade for providing additional fire cover and assistance in rescue and the Ambulance Service for the treatment and evacuation of casualties.

### Maternity Cases

A further decrease occurred in the number of maternity cases conveyed from home addresses to various maternity hospitals during the year, the total being 6,627 as against 7,096 the previous year.

There were 50 calls for ambulances for the Emergency Maternity Service operated by the Birmingham Maternity Hospital, as compared with 83 in the previous year.

### Mileage

The following table shows the division of mileage into the Sections of the Service over the past five years:—

	1967	1968	1969	1970	1971
Hospital removal ambulances .. .. .	1,684,443	1,632,272	1,468,728	1,385,530	1,377,889
Accident ambulances ..	164,738	169,625	185,097	184,325	182,268
	<hr/> 1,849,181	<hr/> 1,801,897	<hr/> 1,653,825	<hr/> 1,569,855	<hr/> 1,560,157

### Hospital Removal Ambulances

The following table shows the average miles per patient carried over the last five years:—

Year	Cases Carried Monthly Average	Mileage Monthly Average	Miles per Patient Average
1967	37,364	140,370	3.75
1968	39,697	136,023	3.42
1969	35,400	122,394	3.45
1970	32,162	115,461	3.59
1971	32,025	114,824	3.58

## Staff

Details of the establishment and strength of the Ambulance Service at the end of 1971 are as follows:—

<i>Operational and Depot Staff</i>	<i>Establishment</i>	<i>Strength at 31. 12. 71</i>		
		<i>Men</i>	<i>Women</i>	<i>Total</i>
Ambulance Officer ..	1	1	—	1
Deputy Ambulance Officer and Hospital Liaison Officer ..	1	1	—	1
Ambulance Depot Superintendents ..	2	2	—	2
Ambulance Training Officer	1	1	—	1
Section Officers .. ..	10	10	—	10
Clerks .. ..	5	1	4	5
Storekeeper .. ..	1	1	—	1
Depot Drivers .. ..	2	2	—	2
Depot Assistants ..	3	3	—	3
Ambulance Cleaners ..	5	5	—	5
Cooks and Cleaners ..	5	—	5	5
Leading Drivers ..	20	18	—	18
Drivers and Attendants	254	168	18	186

### *Ambulance Control*

Ambulance Control Officer	1	1	—	1
Assistant Control Officers	6	6	—	6
Section Officers .. ..	2	2	—	2
Senior Leading Control Operative .. ..	1	—	1	1
Leading Control Operatives .. ..	3	—	3	3
Control Operatives ..	32	3	28	31

## Bed Bureau

There was an increase in the number of requests placed with the Emergency Bed Bureau operated by the Ambulance Service on behalf of the Birmingham Regional Hospital Board. 15,509 requests were received from general practitioners, etc., beds being obtained in 15,001 of these cases.

The figures for the previous year were 15,149 requests, beds being obtained in 14,377 cases.



## Voluntary Service

### HOSPITAL CAR SERVICE

Assistance was again given by the British Red Cross Hospital Car Service as is illustrated by the following table:—

							1970	1971
Patients	..	..	..	..	..	..	14,278	12,625
Mileage ..	..	..	..	..	..	..	100,347	89,464

### ST. JOHN AMBULANCE BRIGADE

Continued valuable assistance was given by the St. John Ambulance Brigade in providing ambulance crews for additional cover at certain periods, whilst the Service is again indebted to those voluntary members of the St. John Ambulance Brigade, the British Red Cross Society and the Women's Royal Voluntary Services, who acted as escorts for patients conveyed by rail.

# PREVENTION OF ILLNESS, CARE AND AFTER-CARE

## Section 28 - National Health Service Act, 1946

### CARE OF THE AGED

The policy, commenced in 1970, to transfer the visiting where social needs were paramount, was not only continued but increased during 1971. Where possible, routine calls were discontinued after notice had been given by letter to the old people concerned although it was made perfectly clear that help would be forthcoming if requested.

Every case on the visiting lists was assessed, and information retained which could be useful to another branch of the Local Authority. By this, it was hoped to conserve the resources of the Health Department for urgent cases, and to do away with duplication of visiting by several agencies.

It was essential to discontinue visiting as many cases as possible so that the specialised geriatric visitors could work even more closely with the hospitals. In February, 1971, a visitor was attached part-time to Dudley Road Hospital and by the end of the year arrangements were in hand for another to start work in the South Birmingham Group. Their collaboration with the medical and nursing staff and the medical social workers seeks to ensure a smoother path for the patients returning home and the provision of services available for domiciliary care.

There is also close liaison with the new Social Services Department to ensure that the resources of both departments can be used to the greater advantage of the individual patient.

The bathing unit at Bacchus Road was closed for geriatric cases in February, 1971. The demand had been falling with better facilities in new houses and flats. The nursing attendants formerly employed here have been integrated with the home nursing service.

Details of persons supervised by geriatric visiting staff on 31st December, 1971, excluding cases closed during the year or transferred to other agencies are as follows:

	1968	1969	1970	1971
Female .. .. .	4,794	4,993	4,270	2,154
Male .. .. .	1,712	2,069	1,755	1,011
Living alone .. .. .	3,107	3,505	3,165	1,685
Living with another old person ..	2,402	2,505	2,243	1,225
Living with relatives or friends ..	997	1,052	617	255
Requiring intensive visiting .. ..	537	605	701	808
Mentally disturbed .. .. .	448	539	430	364

The figures show an overall marked decrease in the numbers of elderly persons supervised due to the policy of only dealing with patients where the greater need was medical. The number, however, of the sick elderly requiring intensive care and visiting has risen steadily over the past four years. The problems of the old person living alone increase each year as the population grows older. That they may bring even more problems upon themselves by continuing to live in substandard dwellings when the surrounding properties are knocked down, is obvious. It is, however, hard to judge the depth of feeling for a place that has been a home for several decades, and it is obvious that their fear of bad conditions and even vandalism is less than that of facing up to the change of environment and habitat.

Out of a total case load of 3,165 persons at the end of 1971, 1,954, i.e. 61·7 per cent were over 75 years of age. 495 of these 3,165 were over 85 years of age, and of this latter group approximately 138 were over 90 years of age. A total of 3,237 persons whose cases were subsequently closed, were visited by the section during 1971, and a further 2,195 were visited and later transferred for future supervision to the following agencies:—

		1969	1970	1971
To area health visitors .. .. .		318	188	339
To home nursing service .. .. .		661	645	751
To mental health section	} Social Services Department from 1.4.71	37	64	52
To social welfare officers		556	787	978
To blind welfare officers .. .. .		45	85	47
To other statutory organisations .. .. .		4	2	1
To voluntary organisations .. .. .		19	21	27
		<hr/>	<hr/>	<hr/>
		1,640	1,792	2,195
		<hr/>	<hr/>	<hr/>

At the end of 1971, a total of 58 persons were being visited by both geriatric health visitors and social workers from the Social Services Department; these were persons with dual needs co-existing, which required the different skills of both workers.

## Preventive Geriatric Clinics

Three general practitioners in the City were providing this service for their patients in 1971. The main obstacle to attendance from those who would benefit most appears to be lack of transport.

## Liaison with Voluntary Organisations

A very valuable contribution made by voluntary workers both in deed and kind is gratefully acknowledged by the Department.

Their help is vital to the comfort and welfare of the elderly in the community and complementary to the efforts of the statutory workers. The Birmingham Council for Old People has 17 Day Centres and five All-Day-Clubs in the City. The Meals on Wheels Service delivered 152,043 meals to frail and housebound elderly persons during the year; an increase of 23,687 over the 1970 figures. The Birmingham Council of Social Service through its Visiting Service for Old People continued to visit the frail and housebound. Their 54 panels of 1,374 voluntary visitors visited a total of 5,760 during the year. The schools attached to their service numbered 80. The Public Health Department continues to be represented on a number of committees of voluntary bodies concerned with the care of the aged.

## Register of Old People at Risk

The information supplied by the staff of this Register continued to be invaluable during the year. By giving the name and address, one can obtain in a few minutes information of any other agencies involved and services, if any, which are already being rendered. This obviously reduces multiple visiting and saves valuable time by other sections. During the year, 162 requests for help were received in the Department from the Register, and their disposal was as follows:—

To geriatric health visitors	..	..	..	..	..	48
To area health visitors	..	..	..	..	..	42
To home nursing service	..	..	..	..	..	5
To home help section (Social Services Dept. from 1.4.71)	..					55
For loan of equipment	..	..	..	..	..	12
						<hr/> 162 <hr/>

Sections of the Public Health Department have continued to notify the Register weekly of "New Cases" and "Cases Ceased".

During 1971, 41 pupil nurses and 8 state enrolled nurses accompanied geriatric health visitors for a session of geriatric visiting experience, and arrangements were made for newly qualified health visitors to spend half a day with their area geriatric health visitors.



## Statistics

1.	1968	1969	1970	1971
Cases on visiting list on 1st January 1971 ..	5,277*	6,506	7,062	6,025
New cases added during the year .. ..	3,611	3,129	3,302	3,051
Cases remaining on visiting list on 31st December, 1971 .. .. .	6,506*	7,062	6,025	3,165
Cases to whom visiting ceased on death, admission to hospital etc. .. ..	2,322	2,589	3,552	3,237
Cases referred to Social Services Dept. ..	569	556	787	1,077
Total visits paid by section .. .. .	18,798	19,929	18,824	16,966
Total visits paid by health visitors (field) ..	3,947	4,231	4,650	5,959
Consultations with clerks .. .. .	12,344	13,904	13,043	13,103

\*A change in statistical annotation. The figures now given refer to those people under active surveillance and not, as in previous years, including people transferred for surveillance to Social Services Department etc.

2. At the end of 1971, a total of 1,489 visits were outstanding. This compares with a total of 3,159 visits outstanding at the end of 1970.

### 3. ANALYSIS OF NEW CASES DURING 1971 TOTAL 3,051

		Number	%
SEX	Male .. .. .	1,030	33·8
	Female .. .. .	2,021	66·2
AGE (YEARS)	60 - 64 .. .. .	377	12·36
	65 - 74 .. .. .	1,050	34·42
	75 - 84 .. .. .	1,253	41·07
	85+ .. .. .	352	11·53
	Not known .. .. .	19	·62
CIVIL STATE	Married .. .. .	1,189	38·98
	Widowed (Spouse deceased)	1,456	47·72
	Single .. .. .	376	12·32
	Apart .. .. .	30	·98
HOUSEHOLD CIRCUMSTANCES	Living alone .. ..	1,191	39·04
	Living with relatives ..	616	20·19
	Living with spouse ..	1,162	38·08
	Living in lodgings ..	82	2·69

## CHIROPODY SERVICES FOR THE AGED

Chiropody for those over 65 years of age and some handicapped people is carried out by the Birmingham Council for Old People on an agency basis for the Public Health Department. There has been a slight modification in policy this year. Previously the number of treatments given by a chiropodist was limited to four per year and only in exceptional cases, usually referred back to the Public Health Department, could that number be exceeded. After consultation with the chiropodists more than four treatments can be given if in the chiropodist's opinion the aged or handicapped person needs more attention.

In 1971, 7,560 people were treated by chiropodists and in all 25,305 treatments were given.

## HOSPITAL FOLLOW-UP WORK BY HEALTH VISITORS

Attachment of staff to the seven major city hospitals continued involving eight health visitors in follow-up of patients and two more on statistical work, all working on a sessional basis.

### Statistics

#### WORK OF THE HOSPITAL FOLLOW-UP VISITORS

<i>Hospitals</i>	<i>Sessions at hospital</i>	<i>Visiting sessions</i>	<i>No. of visits to patients</i>	<i>Other relevant visits</i>	<i>Total No. of visits</i>
Children's .. ..	65½	69	119	22	141
Dudley Road .. ..	106	50	133	110	243
Queen Elizabeth ..	75	61	406	—	406
Royal Orthopaedic ..	36	35	145	—	145
Selly Oak Paediatric ..	38	51	150	—	150
Selly Oak Diabetic ..	45	31	188	—	188
General—Diabetic ..	45	90½	287	17	304
East Birmingham ..	60	64	467	89	556
TOTALS .. .. .	470½	451½	1,895	238	2,133

### The Children's Hospital

The work of the health visitor has shifted its emphasis somewhat to dealing particularly with children suffering from phenylketonuria. Parents of these children experience difficulties in managing the very strict and complicated diets prescribed. They appreciate the opportunity afforded by a home visit to talk to someone who understands and can assist them to cope with this very trying condition.

### **Selly Oak Hospital—Paediatric Unit**

The follow-up of parents who have failed to bring their children for hospital appointments has continued. The home visit has revealed that some parents have a casual attitude towards their child's condition and did not appreciate the importance of again seeing the consultant. Others were experiencing practical difficulties in getting to the hospital and some, financial difficulties in coping with the high travelling costs. The health visitor alongside the staff of the medical social work department, found herself increasingly involved with the training of medical students who attend the paediatric unit in groups at six-weekly intervals.

### **Selly Oak Hospital—Diabetic Unit**

Advice on diet has continued to patients attending the out-patient clinic, and home visits have been made wherever necessary.

### **The Royal Orthopaedic Hospital**

The work here followed the pattern of previous years.

### **The General Hospital—Diabetic Unit**

The health visitor attends the out-patient clinic sessions and makes a particular point of seeing newly diagnosed sufferers from this condition. Follow-up visits to see the patients at home in order to alleviate difficulties encountered have occupied an increasing amount of her time.

### **The Queen Elizabeth Hospital**

The after-care of patients suffering from progressively degenerative and terminal illnesses has continued. An integral part of the work, of course, is the giving of help and support to the families who shoulder the burden of caring for these patients at home.

### **Dudley Road Hospital—Paediatric Unit**

Rather more of the health visitor's time has been spent in attending the special follow-up clinic for babies who gave cause for concern to hospital staff at birth. Additionally she has visited the Care and Assessment Unit to see children and their parents when requested.

## **East Birmingham Hospital—Paediatric Unit**

Many of the referrals for home visits are picked up during ward rounds with the consultants, which the health visitor attends on a weekly basis. Here, a very free interchange of information between hospital staff and the health visitor, takes place, regarding a child's condition, treatment and prognosis and the home situation. Occasionally, conditions in the child's home environment may be prejudicial to a complete recovery. The health visitor uses her skills and knowledge of community resources in an effort to alleviate such conditions.

The staff involved in hospital liaison schemes see that there is a need to increase the work to embrace all age groups and conditions necessitating hospital care. However, full time attachment to a hospital may not be desirable since the health visitor must function as a community based worker in order to maintain an up to date knowledge of community needs and the services available to meet them, and in order to complement hospital care with follow-up care which is effective.



## NATIONAL ASSISTANCE ACTS 1948 & 1951

### COMPULSORY REMOVAL

There has been an increasing demand on the Public Health Department by general practitioners, social workers, relatives, neighbours and friends to have aged people removed to a hospital under the terms of the above Acts.

During 1971 one woman of 79 living in very bad conditions was removed to hospital suffering from internal bleeding and extreme debility. She survived less than a month in hospital.

From the accompanying graph it is interesting to note the variations in demand for removal since the Act's inception. During the first years it was regarded as a convenient way of solving the medical and social problems of some patients but as their environment or condition did not comply with the terms of the Act, very few were actually removed.

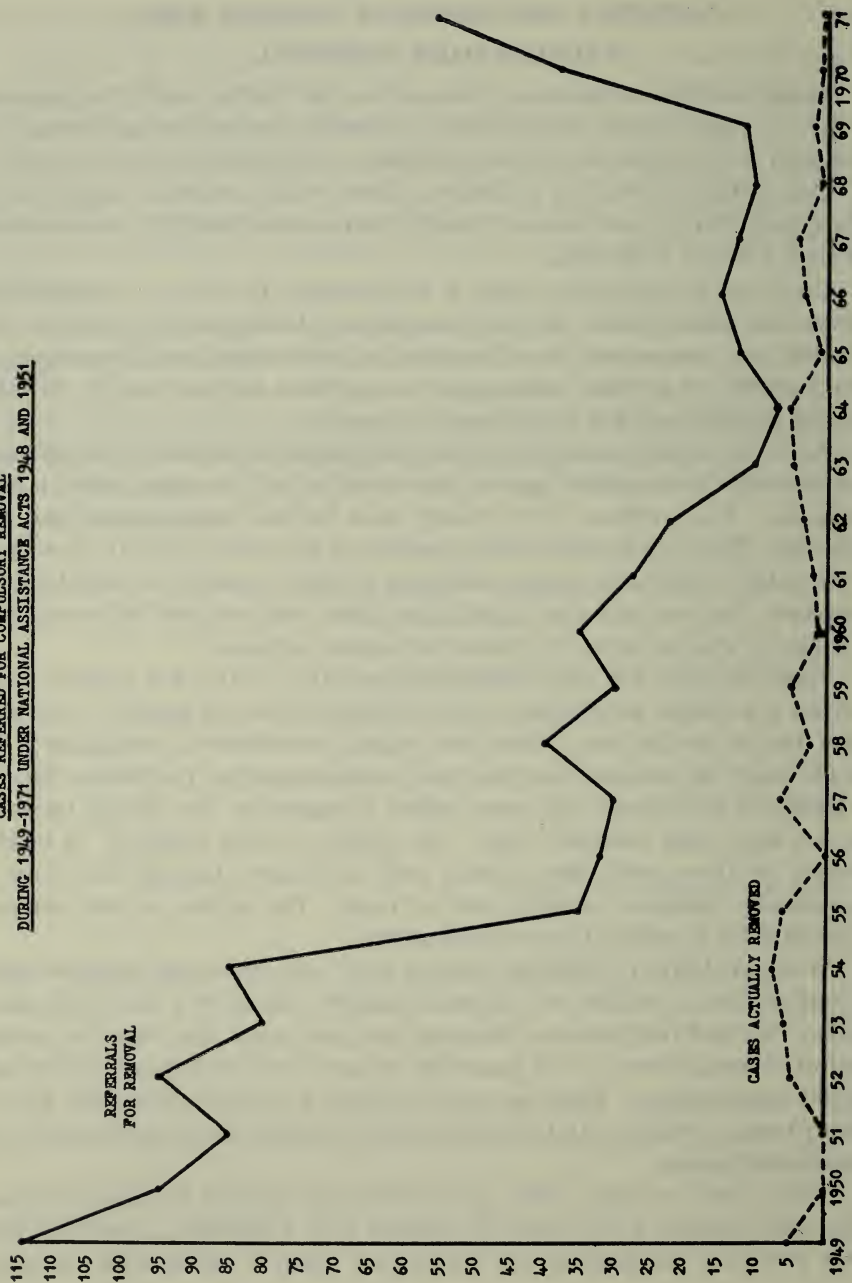
As the terms and implications of the Act became better known the referrals dropped until the late 1960's when a sharp rise began to be noted which is still continuing. The problems of the elderly have become more complex and are increasing. There are however misconceptions of the terms of the Act prevalent in the public's mind and among colleagues in other branches of neighbouring disciplines. For instance some applications have been received for removal of aged people who are active but whose behaviour is bizarre.

There are very few cases where interpretation of the Act justifies what after all is a drastic interference with the liberty of an old person. A medical officer has to see the case, obtain the general practitioner's permission if he has not made the referral, have the form countersigned by the Medical Officer of Health or his Deputy and swear before a magistrate that all the terms of the Act have been complied with. The patient is then removed. If he/she survives for three weeks then another order is obtained through the courts if the patient's condition warrants such an order. The patient is then confined to hospital for a period of up to three months.

It would always be desirable that the frail, debilitated and dying be made as comfortable as possible but physical comfort evinced by a clean bed, three meals a day and the routine of hospital care may count less than the mental comfort of being allowed to die peacefully in one's own bed in familiar although squalid surroundings. There are many border line cases where one has to temper human feelings with the obvious desire to have the patient cared for in a hospital situation.

Until there are more staff and facilities to provide full and adequate domiciliary services, these cases will continue to be a problem and will increase every year, and the demands for compulsory removal will similarly increase.

CASES REFERRED FOR COMPULSORY REMOVAL  
DURING 1949-1971 UNDER NATIONAL ASSISTANCE ACTS 1948 AND 1951



## RECUPERATIVE CONVALESCENCE

During 1971, 303 applications for convalescence were dealt with by the Department, compared with 292 applications in 1970. As in previous years, the majority of applicants were referred by their general practitioners. Many enquiries, not included in the above figures, were received without the support of a medical certificate; medical evidence did not materialise and the applications are not recorded.

Of the 303 applicants, 190 were sent to convalescent homes. The Birmingham Hospital Saturday Fund accommodated 177 and 13 were sent to homes more suitable to their individual needs. Of the remaining 113, 64 applications were cancelled, mostly by the patients themselves and some by the Department after applicants failed to respond to any communications, or were found to be eligible to go free of charge under direct contributions to the Birmingham Hospital Saturday Fund. In the latter cases, applicants were instructed to apply to the firms where the contributions were made. After further reference to the general practitioners concerned, 49 applicants were refused as not coming within the Health Committee's terms of reference for recuperative convalescence (i.e. a recent acute illness or operation or special circumstances which had caused mental or physical ill health).

The following table gives the ages and sex of patients who took convalescence in 1971.

									1971	1970	1969
<i>Age</i>									<i>Total</i>	<i>Total</i>	<i>Total</i>
			0-4	5-15	16-44	45-64	65-74	75+			
Males	..	..	—	4	3	22	14	16	59	41	31
Females	..	..	—	5	14	29	50	33	131	114	95

As in previous years, applications were received from people in the 65+ age group who, although in reasonably good health, had not been able to afford a holiday for many years. Voluntary organisations who arrange spring and autumn holidays for old people at reasonable charges were suggested to such applicants, but in most cases their very limited financial resources precluded them from going any further in the matter. Where people in this age group were eligible for convalescence, age proved no obstacle to acceptance.

The table below shows, in relation to each medical category, the number who applied for convalescence and the number who were accepted.

							<i>Applied</i>	<i>Accepted</i>
Respiratory disease	..	..	..	..	..	..	37	28
Debility	..	..	..	..	..	..	2	2
Post-operative	..	..	..	..	..	..	60	46
Rheumatism and arthritis	..	..	..	..	..	..	18	10
Mental illness	..	..	..	..	..	..	34	18
Organic nervous disease	..	..	..	..	..	..	—	—
Heart disease	..	..	..	..	..	..	21	10
Gastro-intestinal disorder	..	..	..	..	..	..	4	1
Anaemia	..	..	..	..	..	..	5	2
Accident	..	..	..	..	..	..	2	2
Hypertension	..	..	..	..	..	..	—	—
Ulcers, peptic	..	..	..	..	..	..	9	8
Tuberculosis	..	..	..	..	..	..	2	—
Arteriosclerosis	..	..	..	..	..	..	4	1
Senility	..	..	..	..	..	..	—	—
Miscellaneous	..	..	..	..	..	..	105	62



## PRIORITY IN REHOUSING ON MEDICAL GROUNDS

There was again a slight reduction in the number of recommendations made to the City Housing Department: 9,272 compared with 9,581 in the previous year. In addition there were 171 cases referred to us by the Housing Department in which, on enquiry, no medical condition was found and also a large but unrecorded number in which the applicant made a request to the Health Department for his case to be reviewed but in which there was insufficient change in the circumstances to justify a further recommendation to the Housing Department.

The figures given here do not include recommendations made from the Chest Clinic: these are recorded elsewhere in the Report.

### APPLICATION ON GROUNDS OTHER THAN TUBERCULOSIS

	<i>Points awarded</i>				<i>Immediate rehousing recommended</i>	<i>Total applications</i>	<i>Percentage of total</i>
	NIL	10	20	30			
Psychological disorders ..	453	1,706	317	129	12	2,617	28.2
Neurological disorders including fits .. ..	132	134	114	129	27	536	5.8
Chest disorders .. ..	559	660	373	171	20	1,783	19.2
Wounds .. .. .	—	2	2	1	3	8	0.1
Blindness .. .. .	20	19	39	42	1	121	1.3
Rheumatism and arthritis	188	232	308	275	40	1,043	11.2
Other orthopaedic disorders	66	81	76	66	15	304	3.3
Cardiovascular disorders	230	237	335	433	63	1,298	14.0
Other physical defects ..	72	58	55	50	8	243	2.6
Gastro-intestinal disorders	40	30	23	20	3	116	1.3
Genito-urinary disorders	29	25	20	17	1	92	1.0
General debility including disorders not otherwise classified.. .. .	450	344	189	117	11	1,111	12.0
TOTALS .. .. .	2,239	3,528	1,851	1,450	204	9,272	100.0

The detailed statistics in the Table show little change from 1970. Over the years, however, there is a notable decrease in the proportion of chest disorders, from 39.9 per cent in the peak year of 1959 to only 19.2 per cent in the present year. During the same period cardiovascular disorders, rheumatism and arthritis and, particularly, psychological disorders, have increased in prominence.

## HEALTH EDUCATION

The modern epidemics such as lung cancer, obesity, venereal disease and accidents all have their origins in various aspects of human behaviour. The role of a health education section in relation to such conditions is to impart information so that right attitudes may be fostered and appropriate action may be taken in the community at large and within the Health Department itself.

### 1. Health Education for the General Public

This year there was an increase in the number of talks given to the general public from 620 (adult 497; youth 123) to 759 (adult 570; youth 189).

#### (a) ASIAN IMMIGRANTS

Classes for Asian women continued throughout the year at Lansdowne Street Personal and Child Health Centre and at Dudley Road Hospital. These weekly classes, planned to meet the need of the immigrant family, are conducted by health visiting staff and an interpreter. Talks and discussions are illustrated by films and demonstrations.

#### (b) WINSON GREEN PRISON

Three courses on general health education were arranged each term for young offenders, long term prisoners and first offenders. Courses included talks on personal relationships and responsibilities, personal and environmental health, smoking and health, drug abuse, venereal disease and birth control.

#### (c) ANTI-SMOKING CLINICS

Five anti-smoking clinics were held during the year in Trafalgar House, with an average attendance of 60. Four clinics were run by the Public Health Department and one by the Seventh-Day Adventist Health Education Service. Those attending these clinics were in the main recommended by successful participants of previous clinics, the remainder by general practitioners, industry and general publicity.

#### (d) ADULT GROUPS

The general health education programme continued with requests for talks from various organisations in the City—Mother and Baby Clubs, Church Groups, Darby and Joan Clubs, Co-operative Guilds and Townswomen's Guilds. The most popular subjects were home safety, personal health services, venereal disease and emergency resuscitation in that order.

(e) ADULT HOME SAFETY QUIZ

The teams taking part in the quiz this year showed a high standard of knowledge of the subject. St. Michael's Methodist and Anglican Young Wives, Hall Green, were the winners for the second year running. St. Michael's Young Wives won the county round and represented Warwickshire in the Midland Federation Inter-County Final, held at Baskerville House on Thursday, 13th May when they were second to the Wellington Ladies team representing Shropshire. Trophies and prizes were presented by the Medical Officer of Health.

(f) OBESITY CLINICS

In an effort to deal effectively with the medical and social problems of overweight, and following the successful pilot clinic held at Wentworth Road P. & C.H. Centre, it was decided to hold clinics in other areas of the City

Checkweight Slimming Clinics were started at the following P. & C.H. Centres:

Small Heath, Marsh Lane, Stirchley, Yardley and Nechells. These evening clinics have been well attended and obviously meet an important need in the community. Because of the high attendance Stirchley Personal and Child Health Centre also opened an afternoon clinic. Other centres are proposing to do likewise.

At Northfield Health Centre the general practitioners hold a clinic for their own patients, with a health visitor in charge. Many of those attending these centres are referred by general practitioners and hospitals. Children have attended in increasing numbers.

Programmes for classes include talks and films on the hazards of overweight, balanced diet, personal hygiene, and good grooming. Speakers include a dietitian, a physiotherapist and a tailor.

The group therapy method is practised with weighing, record keeping, exercises and discussions. Good results have been achieved.

Although the primary objective of these clinics is to help participants to lose weight, they have equally important functions in teaching ways of continuing weight control and in providing a social occasion for people whose obesity has tended to make them uneasy in company. The opportunity is also there for advice from the health visitor on personal and family problems.



(g) YOUTH GROUPS

INDUSTRIAL APPRENTICES

A course of lectures was held for apprentices of the Dunlop Co. Ltd., and Metro-Cammel Laird Ltd. Subjects included smoking and health, venereal disease, and relationships and responsibilities.

BRITISH LEYLAND AIR TRAINING CORPS, LONGBRIDGE

A series of lectures on environmental health, emergency first aid and resuscitation was held at Longbridge.

APPROVED SCHOOLS

A course of lectures on personal relationships and responsibilities was held for all senior boys of Shawbury Approved School, and on child care and home nursing for all girls at St. John's Approved School.

UNIFORMED GROUPS

Child care courses and examinations were arranged for the following:—

290th Company Girls Brigade and the Perry Barr Rangers. Lecture programmes were arranged for the following Girls Brigade Companies to take their "Health Badge": 174th Company, 80th Company and 88th Company.

## **2. Health Education in Schools and Colleges**

(a) PRIMARY AND SECONDARY SCHOOLS

The need to give the various facets of health education a prominent place in school curricula is being increasingly recognised. This is reflected by the increase to 3,528 from 2,817 in the number of talks given in schools by the staff of the Department. Single lectures and courses of varying length are arranged to suit the needs of individual schools. Most courses are designed as a contribution to the general education of the pupils but, where necessary, courses dealing with a part of the syllabus for the C.S.E. examinations can also be provided.

(b) ENVIRONMENTAL HEALTH COURSE FOR GRAMMAR SCHOOLS

The environmental health course was held in the Health Education Demonstration Room and attended by approximately 56 pupils from:— Lordswood Grammar Technical School, Harrison Barrow Grammar School, King Edward Camp Hill Grammar School, Edgbaston Church of England College, George Dixon Grammar School, King Edward Grammar Schools, Edgbaston High School.



Kings Norton Grammar School for Girls—a similar course was arranged and held at the school. Approximately 25 pupils attended.

Visits of observation were arranged to Frankley Water Works, Lifford Lane Refuse Disposal Works and to Northfield Health Centre.

#### (c) SPECIAL COURSES

Bournville Technical College—a course of lectures was held and subjects included personal relationships, personal and environmental health, venereal disease, and smoking and health.

Handsworth and Erdington Technical College—a series of lectures was held and topics included personal and environmental health, venereal disease, and smoking and health.

Matthew Boulton College—a lecture programme was held on “Your Health in your City”. Topics included personal and environmental health, smoking and health, drugs and health, venereal disease and mental health.

Child Care Courses—Course for the Certificate of Secondary Education and for the Duke of Edinburgh Award Scheme were arranged for the following schools:—Swanshurst Bi-lateral, Blessed Humphrey Middlemore, Turves Green Secondary Girls, Hodge Hill Comprehensive, Stockland Green Bilateral.

Dame Elizabeth Cadbury School—a course of lectures was held for the British Red Cross certificate in first aid.

Northfield Comprehensive School—a series of lectures was held and topics included: work of the health visitor, learning to live, family planning, venereal disease, drugs and alcohol, and smoking and health.

Queen Alexandra College for the Blind—a course on mothercraft was arranged for the senior girls and a course of general health education for the boys.

#### (d) STUDENT PROJECTS

There was a further increase in the number of requests from students of schools and colleges for posters, leaflets, books, reports, charts, advice and information on their various study projects. Approximately 310 written requests and 500 personal callers were dealt with.

(e) CITY OF BIRMINGHAM TRAINING COLLEGE

A series of lectures was arranged for students and teachers undertaking a specialised course; subjects included personal, mental and environmental health, smoking and health, and venereal disease. Observation visits with health visitors and public health inspectors were also arranged.

(f) PRIMARY TEACHERS—SEX EDUCATION COURSE

A series of lectures included anatomy and physiology, bacteriology and infectious diseases, nutrition.

(g) FIRST AID COURSE FOR TEACHERS

A course on first aid for the British Red Cross certificate was held in the Health Education Demonstration Room. This was a preparatory course for leaders of "Outward Bound" courses for schoolchildren.

(h) DAY CONFERENCE FOR HEAD TEACHERS—DRUG ABUSE BY YOUNG PEOPLE

The conference was held at the Education Development Centre, Garrison Lane, on Tuesday, 22nd June, and at the Martineau Teachers' Centre on Thursday, 24th June. Papers presented included "The Student Problem", speaker Dr. T. A. Betts, Lecturer in Psychiatry, Medical School, Birmingham. "Drugs and Prison", speaker Dr. R. A. Washbrook, Medical Officer, H.M. Prison, Birmingham. "Problems as seen from a Treatment Centre", speaker Mr. M. Nyman, Senior Psychiatric Social Worker, All Saints Hospital. "Police Aspects of the Problem", speaker Chief Inspector Clough, City of Birmingham Police.

### 3. Health Education for Professional Groups

(a) STUDENT NURSES

Lectures, discussions and visits of observation were arranged for student nurses of the various hospitals in the City. Topics included environmental, personal and mental health services.

(b) IN-SERVICE STUDY DAYS

(i) *Smoking and Health*

An in-service study day was arranged for public health staff and held in the Health Education Section Demonstration Room, Trafalgar House. Subjects included the following:—

*Morning Session*

“Clinical Aspects of Cancer”, speaker, Dr. L. D. Abrams, Consultant Thoracic Surgeon. “Statistical Aspects—Smoking and Health”, speaker, Dr. J. O. H. Waterhouse, Director, Reader in Medical Statistics, Regional Cancer Registry, Queen Elizabeth Hospital, Birmingham.

*Afternoon Session*

“Smoking and the Community”, speaker, Mr. J. Mahon, Senior Lecturer, Seventh-Day Adventist Health Education Service. “Developing an Effective Anti-smoking programme for Youth”, speaker, Mr. L. Hubbard Senior Lecturer, Seventh-Day Adventist Health Education Service.

(ii) *Obesity and Slimming, Tuesday, 29th June*

An in-service study day was arranged for members of the public health staff and held in the Health Education Section Demonstration Room, Trafalgar House. The programme was repeated on the 5th October for staff unable to attend the first study day.

The lecture programme included the following:—

*Morning Session*

“Physiology of Obesity”, speaker, Dr. R. F. Fletcher, Honorary Lecturer in Medicine, Queen Elizabeth Medical Centre, Birmingham.

“Exercise and Slimming”, speaker, Miss S. Kelly, Senior Physiotherapist, Queen Elizabeth Medical Centre, Birmingham.

*Afternoon Session*

“Psychology of Obesity”, speaker, Dr. R. W. Tibbetts, Consultant Psychiatrist, Queen Elizabeth Hospital, Birmingham.

“Diet and Slimming”, speaker, Miss J. M. Hewitson, Senior Dietitian, General Hospital, Birmingham.

#### 4. Publicity

##### POSTERS, LEAFLETS AND BOOKLETS, ETC.

##### (i) *Anti-smoking*

- (a) General Public—a poster, “Stop: Caution: Go”, designed specifically for anti-smoking clinics was produced in the Section. These posters, which are over-printed with details of each clinic, are distributed to personal and child health centres, school clinics, general practitioners, banks, industry, libraries and other departments of the Corporation. Approximately 1,000 posters with a supply of appointment cards, are prepared and distributed in preparation for each clinic.
- (b) Schools—a letter from the Medical Officer of Health, approved by the Chief Education Officer, was circulated to all schools drawing the attention of primary and secondary teachers to the Royal College of Physicians Report, “Smoking and Health Now”, and quoting the following recommendation. “Since it is easier not to start smoking than to stop, stress has been laid on teaching children about the dangers of smoking. This should be aimed at increasing the respect of children for non-smokers among them. Its effectiveness will increase as more adults give up smoking and set an example to children, strongly influenced as they are by their parents, their older brothers and sisters, and their teachers”.

A distribution of anti-smoking posters and leaflets was made to all schools and further supplies offered on request. Most schools in the City sent for further supplies of the available material.

- (ii) A leaflet on Scabies was produced in the Section, and distributed to centres and clinics of the Department and to industry. It is proposed to have the leaflet produced in the various Asian languages for distribution, particularly to industry.
- (iii) The booklet, “The Work of the Public Health Department”, was revised to bring the content in line with departmental changes carried out during the year. Copies were circulated within the Department and to schools and other organisations. There is a steady increase in the demand from students for this booklet.



#### (iv) *Cervical Cytology*

To comply with requests from industrial and commercial concerns for publicity material and to build up attendances at the selected clinics, a sum of £450 was allocated to purchase 100,000 leaflets for this purpose. Distribution of the leaflet, "Calling All Women", commenced with 10,000 sent to industry in November and the bulk of the remainder will be distributed during the first part of 1972.

### **5. Annual Home Safety Quiz Competition in Schools**

Home safety competitions were introduced to primary and secondary schools during the year to promote understanding of the causes of home and water accidents and their prevention. With the co-operation and hard work of school heads, teachers and public health staff, these ventures were extremely successful. Classes had talks on home safety in preparation for the quiz, and literature on which questions were based was supplied by the Health Education Section. The quizzes themselves were of educational value, not only to the teams but also to the large numbers of supporters who were present. The children were interested and enthusiastic and the teams showed a high standard of knowledge of the subject.

*Junior Schools*—twenty-seven teams took part in the quiz. The final was held at Baskerville House on Tuesday, 7th December, when Kings Norton Junior School defeated Conway Junior and Infant School and Dorrington Junior and Infant School. The Medical Officer of Health presented the trophy to the winners and prizes to the three teams.

Kings Norton Junior School will represent Warwickshire in the Midland Federation Inter-County Final on Friday, 12th May, 1972.

*Senior Schools*—twenty-three teams competed. The final was held at Baskerville House on Thursday, 9th December, when Handsworth Wood Boys School defeated St. Thomas of Canterbury Boys. The trophy and prizes were presented by the Chairman of the Health Committee.

### **6. Exhibitions and Displays**

(a) Hodge Hill Grammar School for Girls, 5th-9th July. Health Services and Anti-Smoking Exhibition. Posters, leaflets and booklets were displayed.

Great Barr Comprehensive Schools, 27th January, Careers Exhibition. Posters, leaflets, booklets and photographs on the various careers in the Public Health Department were displayed. Nurses, health visitors, midwives and nursery nurses were in attendance.

Turves Green Boys' School, 16th-19th February. General health education material, including home safety and anti-smoking was displayed. Leaflets were provided.

(b) Public Health Inspectorate Divisional Office, Birchfield Road, Perry Barr.

Throughout the year material on various health education topics was displayed in the window of the divisional office. Topics included care of medicines, safety of fireworks, food hygiene, anti-smoking, burns and scalds, hypothermia and oil heater safety.

(c) Weoley Castle Community Church, 22nd-29th March. A display on the Public Health Services was erected and displayed. Posters and leaflets were provided for distribution.

Newtown Community Centre, 26th June. "The Happening" Exhibition. Topics portrayed included the Public Health Services, Home Safety, Care of Medicines, Water Safety. Films on emergency resuscitation, water safety and home safety were shown throughout the day, and demonstrations on emergency resuscitation were given.

(d) Personal and Child Health Centres. Display units were erected at various centres in the City. Topics included general home safety, burns and scalds, water safety, safety with fireworks and care of medicines, anti-smoking.

(e) Birmingham University Medical School, 2nd-3rd July. B.M.S.A. Symposium. Posters, leaflets, booklets and photographs on the public health services and the environmental health services were displayed.

Royal Society for the Prevention of Accidents, 30th September, Home Safety Conference. Various visual aids and display units on all aspects of safety were on show in Trafalgar House.

Birmingham Maternity Hospital, 10th July. Open Day. An exhibition unit on mothercraft was produced and displayed.

Royal College of Nursing, Birmingham, 22nd-26th April. Exhibition material on the Public Health Services and general health education including home and water safety was displayed.

## PARENT AND CHILD CENTRE

New policies were put into effect during the year. Most important amongst these was the decision for the Parent and Child Centre to remain outside the newly formed Social Services Department. It clarified the role of the agency as a preventive psychiatric service offering diagnostic and treatment facilities for pre-school children suffering from developmental or behavioural disturbances. In the hope of further increasing the already close liaison with health visitors and general practitioners a process of decentralisation was begun. Social work staff from the Parent and Child Centre now hold weekly consultation sessions at three health centres and one group practice. These are interesting new ventures and present a challenge as the therapeutic value of social casework is by no means taken for granted by the medical profession. To many general practitioners the main function of the social worker is still the provision of practical help. By contrast, the new type of professionally trained social worker sees his role as much wider and considers himself of equal standing with other professions.

The Centre continues to be used by Birmingham University and Birmingham Polytechnic for the fieldwork training of their social work students. In addition three educational psychologists in training have been accepted from the School of Education at Birmingham University for fieldwork experience. Each trainee attends for a day a week during five successive weeks. He or she accompanies the social worker on home visits or participates in joint clinic interviews. This new type of inter-disciplinary collaboration has proved most valuable and stimulating.

The staff at the Centre comprises four full-time and two part-time social workers and one session each from the consultant psychiatrist and the educational psychologist. 162 new cases were referred during the year 1971 and the active caseload at the end of the year stood at 254 families.

# **INSPECTION AND REGISTRATION OF NURSING HOMES AND NURSING AGENCIES**

## **1. Nursing Homes (Public Health Act 1936)**

At the end of 1971 there were twelve nursing homes on the register providing a total of 299 beds. There has not been a cancellation or any new applications for registration in the year under review. One nursing home came under new management, adapted the premises to provide five additional beds and the registration was suitably amended.

There are three nursing homes in the City registered with the Local Authority and approved by the Department of Health and Social Security under the Abortion Act 1967.

All nursing homes are inspected regularly by medical officers of the Health Department.

## **2. Nursing Agencies (Nurses Agencies Act 1957)**

At the end of 1971 there were seven agencies operating in the City.



# MEDICAL SERVICES FOR CHILDREN IN CARE

## CHILDREN ACT, 1948

The total number of children in the care of the local authorities in England and Wales on 31st March, 1971, was 83,668 compared with 71,210 on 31st March, 1970. Comparable figures in Birmingham were 3,620 and 3,424 respectively.

The total number of children admitted to the care of the Local Authority during the year ended 31st March, 1971, was 2,442 compared with 1,656 the previous year and 1,781 in the year ending 31st March, 1969.

The number of illegitimate children coming into care during the year ending 31st March, 1971, because their mothers could not provide for them, was 70 compared with 70 and 62 in each of the two previous years.

### CHILDREN IN THE CARE OF THE BIRMINGHAM SOCIAL SERVICES DEPARTMENT

	Year Ended		
	31.3.70.	31.3.71.	31.3.72.
1. <i>Mode of Accommodation</i>			
Boarded-out .. .. .	818	892	928
In lodgings or residential employment	20	71	71
In children's homes .. .. .	1,040	1,021	1,026
In voluntary homes .. .. .	312	306	334
In residential special schools ..	36	44	56
In hostels for working boys and girls	22	36	39
Allowed to remain with parent or guardian under supervision ..	222	506	627
In other accommodation .. .. .	109	548	539
TOTAL OF ITEM 1 ..	2,579	3,424	3,620
2. <i>Analysis by age groups of children</i>			
0—2 years .. .. .	157	180	167
2—compulsory school age .. .. .	397	337	320
Of compulsory school age .. .. .	1,601	1,975	2,038
Over compulsory school age .. .. .	424	932	1,095
TOTAL OF ITEM 2 ..	2,579	3,424	3,620

During 1971, the Senior Assistant Medical Officer for Personal and Child Health Services acted as medical adviser to the Social Services Committee and carried out duties in connection with the Social Services Department. Liaison was maintained between hospital consultants, general practitioners and the staffs of the Public Health and Social Services Departments. Throughout the year, the medical officer attended meetings of the Social Services Committee and the sub-committee concerned with child care and formal medical reports were presented at regular intervals. Committee members were also advised on medical matters as they arose.

The medical officer was available to meet social workers by appointment and to discuss with them medical problems associated with children in care. Advice was also given regarding prospective adopting parents and case conferences on children, who presented particular medical problems, were attended.

The battered baby syndrome and child neglect continued to cause concern to members of the Health Department and the Social Services Department. Co-operation continued between health visitors and social workers in cases where battery or neglect was suspected.

Placement of children with severe mental handicap continued to cause difficulty due to a shortage of hospital beds for such cases. These children had to remain in residential children's homes while awaiting admission to hospital and this inevitably caused extra strain on the staff in the homes.

### **Deaths of Children in Care**

G. H. born 20.11.57.—This child was severely sub-normal and had been in hospital for over eight years. He died in hospital on 3rd August, 1971, due to left ventricular failure subsequent upon acute haemorrhagic tracheobronchitis.

F. L. born 20.5.54.—This girl suffered from a malignant condition of the liver and died on 3rd April, 1971.

### **Investigations of Foster Home Applications**

The Department continued to investigate and provide medical and health visitor reports to aid officers of the Social Services Department in making an assessment of applicants to become foster parents.

### **Adoption of Children**

The Medical Officer continued to advise the Social Services Department on the suitability of prospective adoptive parents from the medical point of view. Her advice was based on the contents of reports from general practitioners

and hospital consultants. During 1971, there were 110 couples investigated, 85 were recommended as medically fit, 10 were found to have a medical condition which would have been detrimental to the placing of a child with them, 12 were deferred for review in a year's time and 3 couples withdrew their application.

In accordance with the Adoption Act, 1958, information is given to the Birmingham Social Services Department and adoption societies as to whether the household is known to the health visitor for the area concerned. No special visit is made but the information is obtained from the health visitor's record cards and personal knowledge of the family. There is a similar enquiry in regard to persons wishing to become foster parents. In 1971, enquiries were made in 93 cases, 29 were recommended for consideration, 60 were not known to the health visitor, one was cancelled and three were not recommended.

## Statistics

### (a) Adoption

During 1971, 55 sessions of the adoption clinic were held. The results were as follows:—

(a) Preliminary Examinations	..	..	..	..	..	74
Fit for placing	..	..	..	..	..	63
Unfit for placing	..	..	..	..	..	2
Deferred to be re-examined	..	..	..	..	..	9

The babies unfit were:—

Mental and physical handicap	..	..	..	..	1
Family history of mental illness and degenerative neurological condition	..	..	..	..	1

Deferred to be re-examined later:—

Fit to be adopted	..	..	..	..	6
Unfit by reason of slow development	..	..	..	..	3

(b) Number of final pre-court examinations	..	..	..	..	98
Social Services Department placings	..	..	..	..	75
Other adoption agencies	..	..	..	..	23

Results of final examinations:—

Fit to be adopted	..	..	..	..	95
Unfit to be adopted	..	..	..	..	1
Developmental delay	..	..	..	..	1
Adopted but not ideal	..	..	..	..	2
Congenital heart lesion	..	..	..	..	1
Family history of epilepsy and mental illness	..	..	..	..	1

## (b) Referrals to Social Services Department

Number of applications for advice, guidance or assistance made to the Department during year ending 31st March 1971	..	..	..	4,830
Number of children accepted into care after investigation	..	..	..	1,548
Number of children committed to care	..	..	..	894
Total admissions to care	..	..	..	2,442

## Children in the residential establishments of the Social Services Committee; Medical Care

### 1. Medical examinations carried out during 1971

Routine medical examinations	..	..	..	..	1,319
Examinations on admission	..	..	..	..	1,484
Examinations on discharge	..	..	..	..	680
Total number of medical examinations	..	..	..	..	3,483
Phenylketonuria tests	..	..	..	..	18

### 2. Prophylactic vaccinations and immunisations during 1970

D.P.T. (diphtheria, pertussis & tetanus)	..	..	..	149
Poliomyelitis vaccination	..	..	..	135
Smallpox vaccination	..	..	..	11
B.C.G.	..	..	..	38
Measles	..	..	..	16

### 3. Dental inspections/treatment during 1971

### 4. Admission to hospital for treatment

From residential accommodation of Birmingham Social Services Committee	..	..	..	..	126
From other local authorities and voluntary homes	..	..	..	..	3
From being boarded-out	..	..	..	..	14

The reasons for admission to hospital were as follows:

Psychiatric problems	7	Infections	..	..	17
Operations	..	48	Accidents	..	16
Observation	..	23	Treatment	..	32



## 5. Analysis of illnesses

Infectious diseases .. .. .	247
Ear infections .. .. .	101
Respiratory infections and disorders .. .. .	287
Circulatory disorders .. .. .	28
Gastro-intestinal disorders .. .. .	121
Genito-urinary disorders .. .. .	54
Orthopaedic disorders .. .. .	68
Nervous disorders incl. psychiatric conditions .. .. .	73
Fractures .. .. .	20
Minor injuries .. .. .	176
Tonsils .. .. .	107
Other conditions .. .. .	441

# BLIND AND PARTIALLY SIGHTED PERSONS

## The Blind Register

The total number of registered blind persons has decreased by 9 over the last year.

<i>Year end</i>	<i>Total Registered Blind</i>	<i>Blind Children</i>	<i>Blind Men</i>	<i>Blind Women</i>	<i>Blind over 65 years</i>
1966	1,678	41	678	959	1,001
1967	1,670	37	671	962	1,008
1968	1,655	35	665	955	1,006
1969	1,647	30	654	963	1,001
1970	1,669	31	653	985	1,008
1971	1,660	30	665	965	992

<i>Additions to Register 207</i>	<i>1966</i>	<i>1967</i>	<i>1968</i>	<i>1969</i>	<i>1970</i>	<i>1971</i>
Certified blind .. ..	192	162	204	154	190	181
Blind immigrants to						
Birmingham .. ..	19	18	18	19	14	26
Re-included on Register..	1	2	1	1	—	—

<i>Deletions from Register 216</i>						
Through death .. ..	165	156	192	143	152	180
Left Birmingham .. ..	22	27	37	31	26	35
Sight improved .. ..	6	7	9	8	4	1

Among those newly certified in 1971 were 5 children.

Forms B.D.8. completed on examination received during 1971 and relating to newly certified persons and those already registered who moved to reside in Birmingham fall into the following categories:—

Primary senile cataracts .. ..	26
Glaucoma .. ..	27
Other congenital and hereditary defects .. ..	1
Myopia .. ..	6
Ophthalmia neonatorum .. ..	—
Retinitis pigmentosa .. ..	11
Trauma .. ..	—
Diabetes .. ..	12
Other causes (these include senility, cause unknown, arteriosclerosis) ..	124

# ARRANGEMENTS FOR CARE, EDUCATION AND EMPLOYMENT OF THE BLIND

31.12.70								31.12.71
100	Employed in workshops	..	..	..	..	..	..	94
13	Approved homeworkers	..	..	..	..	..	..	11
187	Workers in sighted industry	..	..	..	..	..	..	178
1,084	Unemployable persons at home	..	..	..	..	..	..	1,100
246	Unemployable persons in Regional Board hospitals and various homes	..	..	..	..	..	..	241
11	Children at school	..	..	..	..	..	..	12
13	Children in own homes	..	..	..	..	..	..	15
7	Children in hospitals..	..	..	..	..	..	..	3
—	Babies in Sunshine Homes	..	..	..	..	..	..	—
8	Technical pupils in training	..	..	..	..	..	..	6
<hr/>								
1,669								1,660
<hr/>								

## Register of Partially Sighted

There is no statutory definition in the National Assistance Act of 1948, but the Department of Health and Social Security has advised that a person who is not blind within the meaning of the Act, but is nevertheless substantially and permanently handicapped by congenitally defective vision of a permanently handicapping character, be regarded as partially sighted.

The numbers on the register at the end of the year were:—

594 persons : 173 men : 248 women : 173 children

Forms B.D.8. received during the year 1971 and relating to all newly certified partially sighted persons or those registered already who came to reside in Birmingham fall into the following categories:—

Primary senile cataracts	..	..	..	..	..	..	..	22
Glaucoma	..	..	..	..	..	..	..	7
Other congenital and hereditary defects	..	..	..	..	..	..	..	3
Myopia ..	..	..	..	..	..	..	..	4
Trauma	..	..	..	..	..	..	..	—
Diabetes	..	..	..	..	..	..	..	1
Other causes	..	..	..	..	..	..	..	47

## Blind and Partially Sighted

Forms B.D.8. have been received for newly certified patients in the following age groups:—

<i>Year of Receipt</i>	<i>0—1</i>	<i>2—4</i>	<i>5—15</i>	<i>16—20</i>	<i>21—49</i>	<i>50—64</i>	<i>65+</i>	<i>Total</i>
1966	3	11	14	2	15	39	219	303
1967	1	9	16	4	15	45	170	260
1968	1	14	20	4	19	42	200	300
1969	0	12	11	0	21	37	146	227
1970	3	6	18	3	21	38	181	270
1971	3	6	19	5	19	32	176	260

The causes of loss of vision and the treatment recommended were:—

	<i>Cause of Disability</i>			
	<i>Cataract</i>	<i>Glaucoma</i>	<i>Retrolental Fibroplasia</i>	<i>Others</i>
(i) Number of persons registered during the year in respect of which section "D" of the form B.D.8. recommends:—				
(a) No treatment .. ..	3	4	—	32
(b) Treatment (medical, surgical, optical) ..	39	21	—	161
(ii) Number of persons at (i) (b) above who on follow up at the end of the year had received treatment .. .. .	17	14	—	98

## Deaf-Blind

In 1971 there were 35 deaf-blind persons residing as follows:—

	<i>Men</i>	<i>Women</i>	<i>Children</i>	<i>Total</i>
In own homes .. ..	6	15	1	22
In homes or institutions ..	1	11	1	13
	7	26	2	35



# MOTOR VEHICLE (DRIVING LICENCES) REGULATIONS 1970

Regulation 22 (2) provides for a driving licence to be granted if an applicant suffering from epilepsy satisfies the following conditions:—

- (a) he shall have been free from epileptic attacks whilst awake for at least three years from the date when the licence is to have effect.
- (b) in the case of an applicant who has had such attacks whilst asleep during that period he shall have been subject to such attacks since before the beginning of that period.
- (c) the driving of a vehicle by him in pursuance of the licence is not likely to be a source of danger to the public.

For purposes of these Regulations, the Medical Officer of Health is medical advisor to the licensing authority. Driving licences issued under the provisions of this Regulation are subject to annual renewal.

New applications pending at the end of 1970	..	..	..	..	2
New applications referred by Motor Taxation Office during 1971	..	..	..	..	87
Total	..	..	..	..	89
Recommended for issue of a licence	..	..	..	..	74
Not recommended for issue of a licence	..	..	..	..	9
Pending at the end of 1971	..	..	..	..	6
Total	..	..	..	..	89
Re-applications pending at the end of 1970	..	..	..	..	Nil
Re-applications referred by Motor Taxation Office during 1971	..	..	..	..	32
Total	..	..	..	..	32
Recommended for issue of a licence	..	..	..	..	26
Not recommended for issue of a licence	..	..	..	..	4
Pending at the end of 1971	..	..	..	..	2
Total	..	..	..	..	32

In addition, requests for advice were received from the Motor Taxation Office in 25 cases of various kinds other than epilepsy. In 17 cases we advised that a licence should be issued; in 5 cases we advised that the applicant should not hold a driving licence; one case was pending at the end of the year; one applicant surrendered his licence before our enquiries began and in one case the applicant died in hospital about the time that the case was referred to us.

# FIRST-AID AND STAFF WELFARE SERVICE MEDICAL EXAMINATIONS: CREMATATIONS

## First-Aid and Staff Welfare Service

This service is under the supervision of the Medical Officer for Corporation Staff Welfare.

The number of attendances at the Council House and Bush House Surgeries, staffed and maintained by the Public Health Department, were:—

						1971	1970
Council House ..	..	..	..	..	..	3,535	3,490
Bush House ..	..	..	..	..	..	2,474	2,146
						<hr/> 6,009	<hr/> 5,636

Additional facilities are also provided, but by other Corporation Departments, each for its own staff.

Employees from all Corporation Departments may make use of the service which works in co-operation with general practitioners and hospitals and is of great mutual benefit to employer and employee.

In collaboration with the Chief Public Health and Housing Inspector, Corporation Departments are advised and assisted in complying with the first-aid requirements of the Factories Act, 1961 and the Offices, Shops and Railway Premises Act, 1963.

## Medical Examinations

Medical Examinations carried out by:—

(a) The Medical Officer for Corporation Staff Welfare or his deputies

						1971	1970
Non-manual employees ..	..	..	..	..	..	1,922	2,060
Manual employees ..	..	..	..	..	..	1,171	1,055
On behalf of other Local Authorities ..	..	..	..	..	..	37	38
(b) Other Local Authorities on our behalf ..	..	..	..	..	..	57	87
Among the above, the deputies examined ..	..	..	..	..	..	826	639

The above figures do NOT include those medical examinations done by:—

1. The School Health Service Medical Officers, on behalf of the Education Department and other Local Authorities.

2. The Panel of Medical Practitioners from whom 1,083 completed forms in respect of manual employees were received and dealt with in this department.
3. Other doctors with whom some Corporation Departments have special arrangements.
4. The doctors who advise the Treasurer of the City when the question arises of the premature retirement of Corporation employees on the grounds of permanent ill-health.

## Cremations

The Medical Officer for Corporation Staff Welfare is also the Medical Referee for the two Municipal Crematoria.

Number of Cremation Certificates Examined:—

									1971	1970
Lodge Hill	..	..	..	..	..	..	..	..	3,243	2,948
Yardley	..	..	..	..	..	..	..	..	2,245	2,209
Totals	..	..	..	..	..	..	..	..	5,488	5,157

It should be borne in mind, when comparing these figures, that there was a strike of manual employees at the Crematoria during 1970.

## **FOOD HYGIENE**

The supervision of the hygiene of food, food handling and food premises continues to be a shared responsibility and the Chief Public Health and Housing Inspector exercises control over foodstuffs and all food premises throughout the City with the exception of the central wholesale and retail markets which remain under the supervision of the Chief Veterinary Officer and his Food Inspection Section who supervise all slaughterhouses and bacon factories.

Veterinary services and the work of the City Analyst and the Food and Drugs Sampling Officers are dealt with elsewhere in the Report.

This chapter, therefore, consists of two parts, first the work of the Public Health Inspectorate and then that of the Veterinary and Food Inspection Section.

### **CHIEF PUBLIC HEALTH AND HOUSING INSPECTOR'S SECTION**

#### **INSPECTION OF PREMISES AND FOODSTUFFS**

Examination of foodstuffs in the course of their progress to the consumer and inspection of food premises and food shops are of prime importance both for the protection of the purchasing consumer and of public health. The City is divided into four divisions and attached to each division are two district food inspectors who work under the supervision of the divisional public health inspector and in association with the district inspectorate. Inspectors share the routine inspection of food premises and foodstuffs, complaints are investigated and the specific requirements of the Food and Drugs Act 1955 and the various Regulations and Orders made thereunder are enforced.

During the year a total of 50,138 visits was made in connection with food and the hygiene of food premises compared with 56,799 visits in 1970.



## Food Premises subject to the Food Hygiene (General) Regulations, 1970

	<i>Number of premises</i>	<i>Number to which Reg. 21 applies*</i>	<i>Number which comply with Reg. 21*</i>
Butchers .. .. .	876	876	876
(including those registered for food preparation)			
Grocers .. .. .	842	840	840
Greengrocers .. .. .	687	687	687
Fishmongers .. .. .	27	27	27
Other food shops .. .. .	2,605	1,402	1,402
Horseflesh shops .. .. .	1	1	1
Licensed premises .. .. .	1,939	1,807	1,836
Bakehouses .. .. .	68	68	68
Factory canteens .. .. .	741	741	741
School canteens .. .. .	516	516	516
Eating Houses and catering premises ..	1,039	1,039	1,039
Fish and chip friers .. .. .	361	361	361
Breweries .. .. .	6	6	6
Sweet manufacturers .. .. .	14	14	14
Biscuit manufacturers .. .. .	1	1	1
Potato crisp manufacturers .. .. .	2	2	2
Jam makers .. .. .	1	1	1
Mineral water factories .. .. .	2	2	2
Registered food preparation premises (other than butchers) .. .. .	67	67	67
Cold stores .. .. .	4	4	4
Ice cream manufacturers .. .. .	30	30	30
Egg pasteurisation plant .. .. .	1	1	1
	9,830	8,493	8,522

\* Regulation 21 requires the provision of facilities for washing food and equipment.

### Registered Food Preparation Premises

Certain food preparation premises such as those used for the manufacture of sausage, cooked meats and pork pies or for the preservation, potting or pickling of food are required to be registered under Section 16 (1) of the Food and Drugs Act, 1955.

At the end of the year there were 256 such registered premises in operation of which the bulk (189) were butchers' premises mainly engaged in the manufacture of sausage or the preserving of meat.

## **Registered Eating Houses and Catering Premises**

Section 54 of the Birmingham Corporation Act 1935, requires the registration with the Corporation of all premises substantially or mainly used for the sale of food to members of the public for consumption on the premises. Exception to this requirement is where a Justice's licence for the sale of alcoholic liquor is held. At the end of the year there were 1,039 registered catering premises compared with 1,012 at the end of 1970.

## **Licensed Premises**

Notifications of applications submitted to the Justices for licences to sell intoxicating liquor or for registration of clubs are sent to the Department as they are received so that opportunity can be given for objection to be raised where the requirements of the Acts and Regulations delegated to the Health Committee have not been met. There were 670 notifications received during the year. Opportunity was taken to carry out inspections and call for improvements as required. In no case was it necessary to raise formal objection with the Justices.

The special visits to full on-licence premises were continued during the evening peak trading hours, followed by a visit during the day soon afterwards and a total of 36 on-licence premises were visited at night during the year.

At the end of the year the total of premises licensed for the sale of intoxicating liquor was 1,939 premises which included 740 public houses, 649 off-licences, 99 restaurants and 451 clubs.

Public health inspectors made 1,378 visits during the year to all types of licensed premises and, where necessary, improvements were secured by verbal or written approach to the managements concerned.

## **Bakehouses**

The number of bakehouses operating in the City is 68 and of these, 30 premises are solely engaged in the manufacture of cake confectionery, two restrict their activities to the baking of bread and the remaining 36 manufacture both bread and confectionery in varying proportions. A total of 199 visits was made to bakehouses during the year and the general standard of hygiene was found to be good.

## **School Canteens, Kitchens, etc.**

Regular visits are made to school canteens to inspect food supplies, kitchens and storage conditions. Special checks are made at regular intervals and on request to examine meat, fish and other supplies of food and, where necessary, to check that quality and prices are according to the condition of contract.

This service to schools is also extended to homes and residential premises operated by the Social Services Department and reports on unsatisfactory food supplies are made to the Central Purchasing Department and also taken up with the suppliers. At the same time, where food preparation conditions are found to call for improvement, the attention of the responsible departmental head is drawn. A total of 3,246 visits was made to this class of premises during the year.

### **Factory Canteens**

Regular visits of inspection are made to factory canteens which continue to play such a large part in the feeding habits of many workers and cater for thousands of main meals each day. A generally good standard of hygiene in food handling and of the premises was reported. There were 741 canteens known to be operating in the City in 1971 compared with 745 at the end of 1970, and a total of 369 visits was made.

### **Food Hawkers, Mobile Shops, Mobile Canteens, etc.**

A hawker of food, which term includes the operator of a mobile canteen or shop, must be registered under the provisions of Section 42 of the Birmingham Corporation Act 1948, before he can operate in the City. Under this Section no one, other than a person keeping an open shop for sale of food, shall either by himself, or by any person employed by him, sell, offer or expose for sale any food from any cart, barrow or other vehicle or from any basket, pail, tray or other receptacle unless he is registered with the Corporation. In addition, if it is necessary to use premises for the storage of food intended for such sale from any cart, barrow, etc., then the premises must be suitable and registered with the Corporation.

At the end of the year the number of persons so registered was 537 and this figure included 71 operators of mobile canteens.

The provision of the Food Hygiene (Markets, Stalls and Delivery Vehicles) Regulations 1966 apply in these cases and the co-operation of the operators in meeting requirements has been generally and readily forthcoming, but in eight cases it was necessary to take legal proceedings to secure compliance with the Regulations.

### **Complaints and Request Inspections of Foodstuffs**

A total of 3,906 visits was made during the year in connection with complaints regarding foodstuffs and requests to examine food which was thought to be unfit. Complaints received totalled 859 compared with 683 in 1970 and

below is a table setting out the various foods in respect of which complaints were received:—

<i>Commodity</i>	<i>Total complaints</i>	<i>Foreign matter contained in</i>		<i>Food affected by mould</i>	<i>Other complaints</i>
		<i>Home produced food</i>	<i>Imported food</i>		
Milk	116	71	—	8	37
Butter	11	3	2	3	3
Cheese	28	4	1	10	13
Bread	91	48	1	37	5
Confectionery and sweets	89	47	—	22	20
Cereals	15	8	1	1	5
Jam	10	5	2	3	—
Meat	124	29	2	7	86
Cooked meat	12	4	—	3	5
Meat pies	66	15	—	35	16
Canned meat	33	11	5	8	9
Fish	38	12	1	—	25
Fruit	14	5	2	2	5
Canned fruit	25	7	6	5	7
Vegetables	12	4	—	1	7
Canned vegetables	29	7	3	10	9
Other food	146	55	3	17	71
TOTALS	859	335	29	172	323



The inland Road Port container base at Perry Barr increased its traffic following the settlement of dock labour troubles at the container sea terminal of Tilbury. Fifty-four shipments were landed and 1,337 containers of unexamined food totalling 23,372 tons arrived at the container base—an increase of 913 tons over 1970. The bulk of the unexamined food consisted of fruit (canned, dried and fresh) and rice but there were other diverse foods including butter, gluten, ginger, gelatine, shrimps, onions, tea, meal and even beer. Except for the odd consignment, all meat imports continued to be examined at Tilbury and dispatched direct to the importer.

There was a considerable increase in the number of complaints received which was nearly a quarter as much again as the total for 1970. It will be seen that 43 per cent of the complaints refer to foreign matter in food and most of these related to home produced foods. The principal increase was in regard to fresh meat (up by 110 per cent) and bottled milk (up by 35 per cent). Many of the complaints about meat were as to its quality or freshness and quite a proportion on investigation were considered unfounded. The complaints about bottled milk were mostly in regard to dirt, stains or other substances adhering to the inside of bottles, most of which resulted from the misuse of the bottles by consumers before returning them.

Many of the complaints of mould affected foods are seasonal and arise in the warmer and humid summer months. This almost always indicates a lack of attention by retailers to the coding, dating and rotation of foodstocks. In addition there is sometimes a lack of understanding of manufacturer's coding systems and there is a need for closer liaison on this between food manufacturers and their retail outlets.

All complaints are investigated and in most cases the complaint is taken up with the manufacturer or distributor of the foodstuff concerned who is invited to visit the Department, to examine the foodstuff and make observations on the complaint. In some cases the evidence is inconclusive and it is impossible to allocate the blame to anyone with certainty, but in the majority of cases the shopkeeper, distributor or manufacturer is issued with a warning and where possible advised on any steps he should take to avoid repetition of the cause of the complaints. In a number of cases it was found necessary to institute legal proceedings.

These investigations are most time-consuming and one complaint may involve several visits, telephone calls, interviews and letters before a conclusion is reached. All this is very worthwhile, and lessons are learnt and taught which help add to the protection and safety of our food.

There is still room, however, for the consuming public to exercise its own safeguards and if purchasers will readily draw the attention of food traders to unsatisfactory products and let them know that a high standard is expected and complaints will be pressed unless it is maintained, then in the long run success will be achieved.

### **Imported Food, Inland Road Port and Inland Rail Port**

The Imported Food Regulations 1968 make provision so that, if desirable, inspection of imported food might be deferred until it has reached its place of destination. In the smaller sea ports, and indeed in some of the larger over-worked ports, it is not a practical proposition for all classes of food to be regularly inspected and inspection has been made more difficult with the increased use of bulk containers which are often sealed and refrigerated. The Regulations permit the receiving port health authorities to defer examination and to notify the local authority to whose area the food is consigned who are then responsible for its inspection.

Since the Regulations came into force there has been a steady influx of unexamined food into the City from sea ports, in particular from Liverpool, Holyhead and Hull and to a lesser degree there have been consignments from Fishguard, Manchester and Glasgow. The damaged Menai bridge remained out of use for most of the year and unexamined meat previously passing through Holyhead, was diverted to other sea ports where it was examined prior to onward consignment to the City. During the year there were 597 notifications and almost all of the foodstuffs have been consigned direct to wholesalers or other food firms in the City and have been inspected by this Department's officers on arrival. All food so consigned was found to be in good condition. During the year one consignment of meat croquettes imported from Holland was detained as the meat had been prepared in a factory not on the approved list. The matter was taken up with the Ministry of Agriculture, Fisheries and Food who, after consultation with the Dutch authorities, agreed to approve the factory and the consignment was then released.

Approximately 18 per cent of food containers were examined for fitness and only minor adverse conditions were discovered. As a general rule all cereals and dried fruit are fumigated before leaving Australia but as these foods are very susceptible to infestation a careful check is made on arrival. Except for small consignments of chocolate confectionery from Europe, all containers received at the Road Port were from Australia.

The British Rail inland port is sited in Lawley Street and is also a large container base where containerised goods for the Midland region arrive from sea ports by rail for onward distribution by road or rail. Most of the foods arriving in this inland rail port have already received customs and health clearance and liaison has been set up between this Department's officers and officers of British Rail and Customs and Excise. There was a considerable increase in unexamined food container traffic and some 241 containers totalling 4,356 tons of food, the bulk of which came from Italy, were dealt with during the year.

### Legal Proceedings involving Food and Food Premises, etc.

During the year it was found necessary to institute legal proceedings in the following cases:—

	<i>Cases taken</i>	<i>Fines imposed</i>
Section 2 Food and Drugs Act 1955 (selling food not of the nature, substance or quality demanded by the purchaser) ..	6	£195
Section 8 Food and Drugs Act 1955 (selling, offering or having in possession for the purpose of sale, food which is unfit for human consumption) .. .. .	3	£80
Food Hygiene (General) Regulations 1960 and 1970 (dirty, defective or insufficiently equipped premises and offences in connection with the handling of food) .. .. .	26	£2,084
Food Hygiene (Markets, Stalls and Delivery Vehicles) Regulations 1966 (dirt, disrepair, lack of sufficient equipment and offences in connection with the handling of food) .. .. .	7	£104

In the proceedings taken under Section 2 of the Food and Drugs Act 1955 all cases were in respect of foreign matter in food and included a finger dressing in sausage, an earthworm in a salad sandwich, a dead mouse in a packet of stuffing, a dead fly in a choc-ice, a metal bolt in a loaf of bread and food insects in baby rusks. In two cases the retailers were at fault and in the other four cases the offenders were the actual manufacturers of the foods. All pleaded guilty.

In the proceedings taken under Section 8 of the Food and Drugs Act 1955 two of the cases were in respect of infestation of food by insects due to lack of good stock rotation and care on the part of the retailers. The third



case concerned a mouldy slice of potato in a packet of mouldy crisps which resulted from a breakdown in the manufacturers' production line.

In the proceedings taken under the Food Hygiene (General) Regulations 1960 and 1970 the following premises were involved—nine cafes, two licensed restaurants, one public house, one factory canteen, five general food stores, three butchers, two grocers, two fish and chip shops and one pork meat manufactory. The nine cafes involved were all small and mostly situated in the less salubrious parts of the City. One licensed restaurant sited in the City Centre was, despite its recent modern construction, in a dirty and unsatisfactory state. In the case of the pork meat manufactory this was a fairly large establishment with slaughterhouse attached and although conditions under which slaughtering was carried out were reasonable, this was not so in the food processing side of the factory where there was structural disrepair, dirt and lack of general care and maintenance—fines totalling £230 were imposed. Among these cases three food handlers were summoned for smoking offences and fines were imposed on the licensee of a public house (£20), the proprietor of a general food shop (£30) and the proprietor of a cafe (£20). One application for disqualification of two cafe proprietors from using their premises as a catering business was not granted as, by the time the case was heard, there had been a very worthwhile and sustained improvement. It is encouraging to report that, while dealing fairly with each case, magistrates left no doubt that they fully supported the Department's officers in their endeavours to secure a higher standard of food hygiene and food safety.

The problems presented by food handlers who have low standards of hygiene still remain, especially among immigrants, and much time is spent by the public health inspectorate in persuading and trying to educate them in the requirements of food hygiene and current legislation. This is a slow process and to protect the public more recourse to legal enforcement has had to be taken and it is sad to note that of the 34 defendants charged with offences under the Food Hygiene Regulations, 17 were immigrants, including 15 from the Indian subcontinent.

In the proceedings taken under the Food Hygiene (Markets, Stalls and Delivery Vehicles) Regulations 1966 the cases involved hot dog carts and catering vehicles where equipment was not provided, or the name and address of the proprietors was not exhibited or there were other contraventions of the Regulations. To secure proper supervision of this type of food catering inspectors have made visits at weekends and during the evening to football grounds and other sites at which the stalls operate.



## Game Dealers

Game dealers are required to obtain a licence from the local authority which must be produced in support of an application for an excise licence. Licences are granted annually on 1st July and at the end of the year there were 45 licences in force.

## MILK AND DAIRIES AND ICE CREAM

Supervision of milk and ice cream storage, distribution and sale is carried out by the divisional public health inspectorate but in order to ensure uniformity and continuity of policy the routine inspection of the milk processing dairies, the larger ice cream and iced lollipop manufacturers and the egg pasteurisation plant is maintained by an inspector who has a wide experience in this type of work and is based at the divisional office at Perry Barr.

### Dairy Premises, etc.

The quinquennial licensing as required by the Milk (Special Designation) Regulations 1963 was undertaken during the year and the number of dairies and allied premises licensed and under inspection by the end of the year was as follows:—

Pasteurising plants: all H.T.S.T.	..	..	..	..	..	..	..	4
Sterilising plants	..	..	..	..	..	..	..	4
Distribution depots	..	..	..	..	..	..	..	25
Retail purveyors	..	..	..	..	..	..	..	19
Shops (retailing pre-packed milk)	..	..	..	..	..	..	..	1,536

Although the number of processing plants remained the same there was a reduction in the number of firms in control due to the amalgamation of two dairy concerns. A medium sized dairy situated outside the City, but carrying on considerable trade within the City, was taken over by a City concern and all production was transferred to the parent company's dairy inside the City. The pattern of the formation of larger production groups with a greater capacity for uniform production control and with better staffed and equipped laboratories at processing dairies should in the long run be beneficial from a public health viewpoint.

Planning permission was given for the establishment of another milk distribution depot in the eastern sector of the City.

### Untreated Milk

There is no knowledge of its retail in the City.

## Milk Packaging

Acceptability trials in a selected area of the City were conducted by a dairy organisation in order to measure customer reaction to the retail of pasteurised milk in one pint polythene sachets. Advance publicity was given to individual customers who were supplied with a rigid plastic holder into which the full sachet was placed, the corner of the sachet being cut to permit pouring. Samples were obtained in the normal manner and on test were satisfactory. After two months the trials were abandoned following increasing complaints of "pin-point" leakages of the sachets. It is commented that a satisfactory form of milk packaging of this type would reduce public health hazards and in particular would eliminate complaints arising from improperly cleansed containers or the presence of foreign bodies in milk bottles. Furthermore, container disposal would not present the same problem as the use of rigid plastic bottles would involve.

## Cold Milk Dispensing Machines

A slight rise in the number of unsatisfactory samples came from these sources. The training of staff in the correct use of dispensers in catering establishments is difficult for there is a very high rate of staff turnover but efforts have continued to obtain improvement by follow-up visits and instruction as necessary.

## Milk Vending Machines

This form of milk sale has remained trouble free from a health viewpoint.

## Complaints

A total of 46 complaints was received and these are summarised as follows:-

						<i>General public</i>	<i>Schools</i>
Inadequately cleansed bottles	..	..	..	..	..	23	Nil
Foreign objects in bottles	..	..	..	..	..	10	Nil
Taints, abnormalities and souring	..	..	..	..	..	1	3
Watery sterilized milk	..	..	..	..	..	9	Nil

Twenty-three out of a total of 46 complaints from the general public concerned inadequately cleansed bottles. Stale milk solids accounted for eight of the total, there were four instances of hardened sand and cement deposits in

bottles, two bottles were tainted by paraffin and two instances arose of insect larvae in bottles. The balance was made up of traces of oil, grease and paint and slight traces of unidentified matter. Foreign objects included the usual collection of plastic toys, milk bottle caps, cardboard and paper and one complaint involved the presence of a large piece of glass from the neck of another bottle which was found to be due to a breakage incident during the filling and capping of the bottle. Other complaints referred to sour or 'off-flavour' milk including three from schools. It was found on investigation of the schools' complaints that instances were arising where old cartons of milk were being supplied due to poor stock rotation at depots. The matter was taken up with management and the situation rectified immediately.

In 15 instances legal proceedings were authorised and summonses taken out for breaches of Regulation 27 of the Milk (General) Regulations 1959. Convictions were obtained in all cases and fines totalling £125 were imposed. One dairy company has introduced a bonus scheme for the detection of unclean bottles. A fixed weekly bonus is paid to all employees engaged in the processing or distribution of milk. Bonuses are reduced in the event of the firm receiving a complaint of foreign matter or a dirty bottle from the public and if the public health inspector is involved the entire bonus is forfeited for that particular week. Employees are keen on the scheme and early results appear to have been encouraging.

Twelve other complaints were investigated and considered unjustified. Seven of these arose from imperfections in the glass of which the bottle was formed. The bottles have an objectionable appearance giving an impression of the presence of slugs or large grease blobs within the milk. There is no health hazard but bottles are taken out of circulation when found. Two other complaints concerned scuffing (a trade term for the scratching on the outside of bottles due to fair wear and tear). Although external appearances are poor the contents are not at risk.

## **Fresh Cream**

A marginal decline in standards was noted in overall results of fresh cream samples which are obtained from retail outlets and from bulk containers and utensils in confectionery bakeries. Out of 337 samples 68 (20 per cent) fell below the recommended "satisfactory" standard compared with 17 per cent in 1970. All adverse samples were followed up and advice was given to managements.



## Ice Cream and Iced Lollipops

Registration of persons and premises for the manufacture and sale of ice cream and iced lollipops is effected under Section 54 of the Birmingham Corporation Act 1935 as extended by Section 58 of the Birmingham Corporation Act 1954. There were 106 new registrations of persons and premises for the sale of ice cream and iced lollipops and 88 cancellations (due mainly to slum clearance and demolition of property), an overall increase of 18 registrations. Thirteen persons were registered to manufacture and sell ice cream from mobile vehicles. The premises of one ice cream manufacturer and two iced lollipop manufacturers were removed from the register following demolition. One new registration of a person and premises was effected in respect of the manufacture and sale of iced lollipops.

### Registration under Birmingham Corporation Acts 1935-1954.

#### *Persons*

(a)	For manufacture and sale of ice cream	..	..	..	..	153
					<i>123 in respect of manufacture of soft ice cream on mobile vehicles</i>	
(b)	For manufacture and sale of iced lollipops	..	..	..	..	20
(c)	For sale of ice cream and iced lollipops	..	..	..	..	3,240

#### *Premises*

(a)	For the manufacture of ice cream	..	..	..	..	30
					<i>25 in respect of shops with soft ice cream freezers</i>	
(b)	For manufacture and sale of iced lollipops	..	..	..	..	20

No complaints were received from the public in respect of ice cream or iced lollipops.

The majority of unsatisfactory samples of ice cream (i.e. 58 Grade III and 41 Grade IV) come from soft ice cream vendors. Poor stock rotation and unsatisfactory cleansing and sterilising procedures were generally responsible for failures. Each adverse result was followed up and appropriate advice given.



## Yoghourt

No problems arose out of the sale of this foodstuff despite a continued increase in demand. In this field attempts at education on stock rotation seems to have borne fruit, assisted by a growing number of manufacturers who now mark packages with open date codes of one variety or another. No complaints were received from the public.

## SAMPLING OF MILK, ICE CREAM AND ALLIED PRODUCTS

Routine sampling was continued on the reduced scale of the previous year. Reference to other samples of food and drugs is to be found, as in the past, in the part of the Report dealing with the work of the Analytical Laboratory.

### PASTEURISED MILK

				<i>Methylene Blue Test</i>		<i>Phosphatase Test</i>	
				<i>Submitted</i>	<i>Failed</i>	<i>Submitted</i>	<i>Failed</i>
<i>From dairies inside City</i>							
From roundsmen	..	..	164	Nil	176	2	
From schools	..	..	73	2	76	2	
From vending machines	..	..	50	Nil	51	Nil	
From churns	..	..	32	Nil	34	Nil	
From dispensers	..	..	208	24	Nil	Nil	
<i>From dairies outside City</i>							
From roundsmen	..	..	92	Nil	96	Nil	
From churns	..	..	9	Nil	9	Nil	

### STERILISED MILK

						<i>Turbidity Test</i>	
						<i>submitted</i>	<i>failed</i>
From dairies inside City	..	..	..	..	..	44	Nil
From dairies outside City	..	..	..	..	..	22	Nil

### ULTRA HEAT TREATED MILK

						<i>Colony Count Test</i>	
						<i>submitted</i>	<i>failed</i>
From retail shops processed outside City	..	..	..	..	..	2	Nil

### MILK PRIOR TO PROCESSING

						<i>Antibiotic</i>	
						<i>submitted</i>	<i>positive</i>
From processing dairies	..	..	..	..	..	250	2

One sample of goats' milk was submitted to the methylene blue test and was examined for *Brucella* with satisfactory results.

As will be seen, two samples of pasteurised milk failed the phosphatase test prescribed by the Milk (Special Designation) Regulations 1963. (The phosphatase test is used to determine if milk has been pasteurised effectively.) The matter was raised immediately with the dairy management and investigation revealed that two pairs of heat exchange plates had been assembled out of sequence thus permitting the leakage of raw milk into processed milk when the flow diversion valve of the pasteurising plant was in operation. The fault was rectified and subsequent samples conformed to the test. Later the plant was examined by a technical representative of its maker and confirmed as working satisfactorily.

### Churn and Bottle Washing

Examination of churns and bottles after their run through the washing plant at the dairies gave the following results:—

Churns .. .. .	19 samples taken: 1 Unsatisfactory
Bottles .. .. .	28 samples taken: 1 Unsatisfactory

### Fresh Cream

337 samples were submitted for the provisional methylene blue test:—

<i>Number of samples</i>	<i>Decolourisation time</i>	<i>Remarks</i>
17	Nil	Unsatisfactory
51	$\frac{1}{2}$ to 4 hours	Fairly Satisfactory
269	More than 4 hours	Satisfactory

### Imitation Cream

Samples from bakeries gave the following results:—

	<i>No. of samples</i>	<i>Plate Count satisfactory</i>	<i>Plate Count unsatisfactory</i>	<i>B. Coli present</i>
Unopened tins .. ..	18	22	1	Nil
Mixing bowls .. ..	15	12	3	Nil

## Ice Cream

Results of samples submitted to the provisional methylene blue tests were as follows:—

<i>Grade</i>	<i>Manufactured on premises in the City</i>	<i>Manufactured on premises outside the City</i>	<i>Total 1971</i>	<i>Total 1970</i>
1 & 2	377	266	643	613
3 & 4	76	23	99	58

A total of 343 samples was submitted for chemical analysis and all but one were satisfactory.

## Iced Lollipops

One hundred and four samples were submitted for bacteriological examination and eight for chemical analysis to detect presence of metallic contamination. All samples were satisfactory.

## Egg

Thirty-four samples of pasteurised egg were taken for the alpha-amylase test to assess the adequacy of pasteurisation. All except one were satisfactory.

Three samples of pasteurised egg (included above) were examined in connection with a food poisoning investigation and proved satisfactory.

## Special Samples

In addition to routine sampling, the following special samples were taken and examined in connection with complaints of investigations into abnormality, food poisoning or unsatisfactory routine results:—

## Ice Cream

47 ice cream mixes	..	..	..	..	..	..	34 satisfactory
							13 unsatisfactory
5 ice cream samples were examined for the presence of							
E. Coli and for colony counts	..	..	..	..	..	..	satisfactory
6 rinses from returnable polythene ice cream mix bottles							
examined	..	..	..	..	..	..	satisfactory

## SHELLFISH

Of the various shellfish on sale, mussels are considered to be the most likely to give unsatisfactory results. The following table shows the numbers of samples taken and the results obtained. In each case an average of two pools of five mussels each was taken.

<i>Source</i>	<i>Number of Samples</i>	<i>Not exceeding 5 B. coli Type 1 per 1 ml. of fish (satisfactory)</i>	<i>Exceeding 5 but not exceeding 15 B. coli Type 1 per 1 ml. of fish (suspect)</i>	<i>Exceeding 15 B. coli Type 1 per 1 ml. of fish (unsatisfactory)</i>
A	57	56	—	1
B	11	9	1	1
C	2	1	1	—
D	2	2	—	—
E	1	1	—	—
F	1	1	—	—
TOTAL	74	70	2	2

The “unsatisfactory” sample from source “A” proved to be an isolated case as all subsequent samples from this source were “satisfactory”; no further action was taken.

The “unsatisfactory” sample from source “B” showed a very high degree of contamination and a report was made to the Medical Officer of Health concerned. In view of a history of “suspect” and “unsatisfactory” samples from this source, it was decided that further supplies would not be acceptable in Birmingham.

## VETERINARY AND FOOD INSPECTION SECTION

### SLAUGHTERHOUSES AND MEAT INSPECTION

In addition to the public abattoir, which is the main slaughtering centre in the City, at the end of 1971 there were nine licensed private slaughterhouses. Meat inspection is carried out by a staff of authorised meat inspectors under the supervision of veterinary officers, and animals are examined before and after slaughter to ascertain their fitness for human consumption. This staff is based



at the public abattoir, where a laboratory is maintained to assist in the diagnosis of various diseases, and visits are made as necessary to the private slaughterhouses. 3,250 such visits were made in 1971.

The meat inspection staff are also responsible for ensuring that high standards of hygiene are maintained in the slaughterhouses and that slaughtering is carried out humanely, and for the inspection of the vehicles used for the transport of animals and of meat.

It is not usually necessary to take legal action to ensure compliance with the required standards, verbal warnings and/or advice usually being sufficient. There were no prosecutions during the year.

### Animals slaughtered in the City

The following table shows the numbers of animals slaughtered at slaughterhouses in the City with comparative figures for 1970.

				<i>Beasts</i>	<i>Calves</i>	<i>Sheep</i>	<i>Pigs</i>	<i>Total</i>
Public Abattoir	..	..	1971	27,463	1,764	204,383	87,527	321,137
			1970	29,583	6,067	198,993	87,057	321,700
Private slaughterhouses	..	..	1971	511	195	29,742	90,140	120,588
			1970	638	113	26,871	80,104	107,726
TOTAL			1971	27,974	1,959	234,125	177,667	441,725
			.. .. 1970	30,221	6,180	225,864	167,161	429,426

### Licensing of Slaughtermen

The slaughtering or stunning of animals in a slaughterhouse is permissible only by persons holding a licence granted by the local authority. Licences, other than renewals of existing licences, are granted subject to the condition that the holder may slaughter or stun animals only under the supervision of an experienced slaughterman; a full licence is then granted when the slaughterman has gained experience and can demonstrate his efficiency.

At the 31st December, 1971, there were 92 licences in force, 12 of which were provisional.

There are no knackers' yards in Birmingham.

# Incidence of disease

The following table shows the incidence of various diseases in food animals slaughtered in the City.

## CONDEMNATIONS

AT PUBLIC ABATTOIR

AT PRIVATE SLAUGHTERHOUSES

	At Public Abattoir				At Private Slaughterhouses			
	Carcases		Offal		Carcases		Offal	
	Total	Partial	Total	Partial	Total	Partial	Total	Partial
<b>ADULT CATTLE:</b>								
Tuberculosis ... ..	—	—	—	—	—	—	—	—
Johne's disease ... ..	—	—	—	—	—	—	—	—
Actinobacillosis (—mycosis) ... ..	1	—	1	58	—	—	—	—
Septicaemic conditions ... ..	5	—	5	—	—	—	—	—
Pneumonia and/or pleurisy ... ..	1	8	1	1376	—	—	—	4
Peritonitis ... ..	6	192	6	311	—	—	—	—
Mastitis ... ..	3	2	3	—	—	—	—	—
Hepatic abscess ... ..	1	348	1	2138	—	—	—	13
Fascioliasis (fluke) ... ..	—	—	—	4896	—	—	—	29
Parasitic pneumonia ... ..	—	—	—	—	—	—	—	2
Echinococcosis ... ..	—	—	—	707	—	—	—	1
Cysticercosis (C. bovis)								
(a) Rejected ... ..	—	—	—	42	—	—	—	2
(b) Refrigerated ... ..	42	—	—	42	2	—	—	2
Tumours ... ..	—	—	—	—	—	—	—	—
Bruising ... ..	1	126	1	—	—	—	—	—
Emaciation and oedema ... ..	16	1	16	3	—	—	—	—
Other conditions ... ..	10	832	10	1411	—	1	—	5
<b>CALVES:</b>								
Congenital tuberculosis ... ..	—	—	—	—	—	—	—	—
Tuberculosis ... ..	—	—	—	—	—	—	—	—
Septicaemic conditions ... ..	4	—	4	—	—	—	—	—
Joint-ill or navel-ill... ..	7	—	7	—	2	—	2	—
Bruising ... ..	1	1	1	—	—	—	—	—
Emaciation and oedema ... ..	4	—	4	—	—	—	—	—
Immaturity ... ..	1	—	1	—	—	—	—	—
Other conditions ... ..	25	2	25	16	—	—	—	1
<b>PIGS:</b>								
Swine fever ... ..	—	—	—	—	—	—	—	—
Swine erysipelas ... ..	13	14	13	—	2	14	2	—
Tuberculosis ... ..	9	—	9	2175	3	8	3	1441
Septicaemic conditions ... ..	64	—	64	—	28	—	28	—
Pneumonia and/or pleurisy ... ..	27	67	27	6322	10	212	10	4293
Pyæmia ... ..	99	—	99	—	47	—	47	—
Arthritis ... ..	24	359	24	—	26	163	26	—
Abscess ... ..	58	501	58	247	46	379	46	51
Echinococcosis ... ..	—	4	—	37	—	—	—	7
Ascariasis ... ..	—	—	—	7839	—	—	—	2981
Bruising ... ..	3	225	3	—	1	126	1	—
Other conditions ... ..	134	377	134	3714	55	11	55	5804
<b>SHEEP:</b>								
Septicaemic conditions ... ..	18	—	18	—	1	—	1	—
Pyæmia ... ..	274	—	274	—	10	—	10	—
Pneumonia and/or pleurisy ... ..	39	347	39	511	2	8	2	70
Arthritis ... ..	23	274	23	—	1	29	1	—
Fascioliasis (fluke) ... ..	—	—	—	13270	—	—	—	1875
Cysticercus ovis ... ..	—	2	—	—	—	—	—	—
Echinococcosis ... ..	1	1	1	19529	—	—	—	2445
Bruising ... ..	15	156	15	—	1	11	1	—
Emaciation and oedema ... ..	795	—	795	—	44	—	44	—
Other conditions ... ..	277	1100	277	1112	5	29	5	10

## CENTRAL WHOLESALE AND RETAIL MARKETS

The markets concerned are the wholesale fish, fruit and vegetable markets, the Bull Ring Centre market hall and the Bull Ring open-air market. Senior food inspectors are engaged on work in these markets where a continuous check is made on the foodstuffs passing through and on the standards of hygiene.

### FOODSTUFFS JUDGED AS UNFIT

					1970			1971		
					<i>T.</i>	<i>c.</i>	<i>q.</i>	<i>T.</i>	<i>c.</i>	<i>q.</i>
Meat and offal ..	..	..	..	..	338	0	3	317	1	1
Fish ..	..	..	..	..	25	5	0	17	16	0
Poultry, etc. ..	..	..	..	..	53	10	3	35	13	1
Fruit and vegetables ..	..	..	..	..	682	13	3	726	4	1
Miscellaneous ..	..	..	..	..	106	4	3	69	15	0
					1205	15	0	1166	9	3

These figures represent all foodstuffs rejected as unfit for human consumption. The bulk of these foodstuffs—1,089 tons 7 cwts. 1 qr.—was surrendered at the wholesale and central markets, public abattoir and private slaughterhouses before it reached the retail outlets. The remainder—77 tons 2 cwts. 2 qrs.—was surrendered to the public health inspectors at food premises and shops throughout the City.

# VETERINARY SERVICES

## DISEASES OF ANIMALS ACTS

The Department is responsible through its Veterinary Section for carrying out the duties of the Local Authority under these Acts and the Orders made under them. In addition to those specifically mentioned below, these duties include the publication of the Orders of the Ministry of Agriculture, Fisheries and Food, the supervision of the cleansing and disinfection of infected premises, the issuing of licences for the movement of animals, and the enforcement of Orders made for the protection of animals and poultry from unnecessary suffering during transit.

Two veterinary officers have been appointed local veterinary inspectors of the Ministry of Agriculture, Fisheries and Food in Birmingham, and in that capacity make diagnostic inquiries into suspected scheduled diseases.

### Dead Animals

Animals found dead on arrival at their destinations or which may die whilst awaiting slaughter, and pigs which die on private premises, are examined to ascertain the presence or otherwise of anthrax or other scheduled contagious diseases. The following table shows the numbers found dead during the year:—

	<i>Beasts</i>	<i>Calves</i>	<i>Sheep</i>	<i>Pigs</i>
City Abattoir .. ..	2	5	85	68
Other slaughterhouses ..	—	—	—	76
Pig keepers' premises ..	—	—	—	—
	2	5	85	144

The result of the examination was negative in each case.

### Diseases of Animals (Waste Foods) Order 1957

This Order provides for the licensing by local authorities of plant used for the boiling of waste food intended for feeding to animals or poultry. At the 31st December, 1971, 19 licences remained in force.

### Pig Keepers' Premises

These premises are visited to examine dead pigs, to inspect the records which are required to be kept under the Movement of Animals (Records) Order 1960, and to check that the provisions of the Diseases of Animals (Waste Foods) Order 1957, are complied with. Additionally, visits are made to see



store pigs which have been brought into the City under licence, during the period of 28 days' detention prescribed by the licence. During the year, 673 store pigs were licensed to premises in the City and 14 visits were made.

### **Importation of Dogs and Cats Orders 1928 to 1970**

The R.S.P.C.A. kennels at Barnes Hill, California, are approved by the Ministry of Agriculture, Fisheries and Food as a place of detention and isolation for imported dogs undergoing quarantine.

A veterinary officer visits the premises once in every period of four weeks and makes a report to the Ministry of Agriculture, Fisheries and Food.

### **Certificates for export**

Export certificates are issued when required for animal casings, meat and dogs which are to be exported. The form of certificate varies according to the requirements of the country of destination; in the case of dogs for certain destinations, blood samples have to be taken and submitted to the Ministry of Agriculture laboratory for examination.

### **PET SHOPS**

The Pet Animals Act 1951 regulates the sale of pet animals and makes it an offence to keep a pet shop except under the authority of a licence granted by the local authority.

The licensing and inspection of pet shops is carried out by the Veterinary Section and during the year 181 visits were made to proposed new pet shops and to existing pet shops, to ensure that the conditions of the licence were being observed.

At the 31st December, 1971, there were 61 licensed pet shops in the City.

### **ANIMAL BOARDING ESTABLISHMENTS**

The Animal Boarding Establishments Act 1963 regulates the keeping of boarding establishments for dogs and cats and makes it an offence to keep such an establishment except under the authority of a licence granted by the local authority.

The licensing and inspection of these premises is carried out by the Veterinary Section and during the year 16 visits were made in connection with the granting of licences and to ensure that, where licences had been granted, the conditions of the licence were being complied with.

At the 31st December, 1971, there were 9 licensed animal boarding establishments in the City.

## **RIDING ESTABLISHMENTS**

The Riding Establishments Act 1964 and 1970 requires local authorities to inspect and licence riding establishments. There is only one licensed riding establishment in the City and during 1971 9 visits were made.

## **CARE OF CORPORATION HORSES, ETC.**

This work is carried out by the Veterinary Section and covers the provision of feeding stuffs and bedding for animals owned by the Corporation, and the shoeing of the horses and veterinary attention when required.

### **Animal Feeding Stuffs and Bedding**

A granary is maintained, supplies of feeding stuffs, etc., being purchased in bulk and delivered to other departments and institutions as required.

### **Blacksmiths**

A blacksmith is employed at the Department's forge. In addition to the shoeing of the Police horses, he carries out general work for the Public Works Department.

### **Veterinary Attention**

Animals belonging to the Corporation receive veterinary attention from one of the Department's veterinary officers whenever necessary. During the year, treatment was given to the Police horses and to dogs belonging to the Parks, Police and Water Departments.

The purchase of new horses and the sale of horses no longer required are arranged by the Chief Veterinary Officer. All new police dogs are examined, X-rayed for hip dysplasia, and vaccinated against distemper, contagious hepatitis and leptospirosis.

### **Horses**

The Department owns 23 horses which are hired to the Police. Three new horses were bought during the year at a total cost of £1,320, as replacements for horses which were disposed of as unsuitable for further police work.

## ENVIRONMENTAL HEALTH SERVICES

### Staff

The staff available to carry out the very numerous duties of this Section suffered a severe setback during the year. Four members of the staff died (two after long periods of illness), a further seven suffered serious illness for many weeks, one retired, seven resigned to take up other appointments and four pupils and a technical assistant left the service. With such a material reduction in staff the load had to be spread and it is not surprising to find a fall in the total number of visits made. It is pleasing to note that one qualified inspector who had previously trained with the City rejoined the staff from abroad.

The number of staff employed on district duties at the end of the year was as follows:—

	<i>Establishment</i>	<i>1970 Actual</i>	<i>1971 Actual</i>
District Inspectors .. .. .	12	12	12
Senior Assistant District Inspectors ..	12	12	12
Assistant District Inspectors ..	54	48	45
Student Public Health Inspectors ..	24	21	18
Technical Assistants .. .. .	24	16	16

The number of students under training at the end of the year was as follows:—

<i>Year</i>	<i>Number of students</i>
First year : Degree .. ..	2
Diploma .. ..	4
Second year : Degree .. ..	2
Diploma .. ..	2
Third year : Degree .. ..	2
Diploma .. ..	4
Fourth year : Degree .. ..	2
	—
	18
	—

Five final year students qualified and were appointed to the qualified staff.

The duties under the Shops Act 1950 continued to be carried out by inspectors who specialise in this aspect of the work.

### Inspections

There was a fall in the number of inspections undertaken. This was attributable not only to the reduction in the number of inspectors in post but also to the sickness of some members of the staff for comparatively long periods.

Another contributory factor was that the legislation in the Housing Act 1969 is very complex and calls for longer periods to be spent in the inspection of houses arising from applications for improvement grants and qualification certificates and the surveys necessary in connection with general improvement areas. There was a drop of over 2,000 in the number of unsuccessful visits made to premises.

Comparative figures are:—

1968	..	..	..	..	..	324,239 inspections
1969	..	..	..	..	..	343,113 "
1970	..	..	..	..	..	351,256 "
1971	..	..	..	..	..	329,615 "

The total of visits by staff engaged on general district duties during 1971 was made up as follows:—

		<i>% of total</i>
House inspections	139,378	55.37
Inspection of food premises	12,852	5.10
Visits re. infectious diseases	10,678	4.24
Inspections of outworkers' premises	339	0.13
Inspections of tents, vans and sheds	57	0.02
Inspections of stables and pigsties	142	0.06
Inspection of tips	823	0.33
Visits to burials, exhumations, etc.	2	0.00
Inspections of pleasure fairs and circuses	109	0.04
Visits re sampling of water (not by water sampling officer)	1,397	0.55
Visits re taking of rag flock samples	7	0.00
Inspections of offensive trade premises	17	0.01
Inspections of factory premises	3,677	1.46
Inspections of surface air-raid shelters	7	0.00
Inspections of common lodging houses	88	0.03
Inspections of premises re Town and Country Planning applications	2,470	0.98
Inspections of public houses	282	0.11
Visits by students under instruction by qualified inspectors	14,596	5.80
Joint visits made by qualified inspectors	3,263	1.30
Other successful visits	26,723	10.61
Unsuccessful visits	26,252	10.44
Visits re lectures and demonstrations to visitors	221	0.09
Visits to offices and shops	3,066	1.22
Inspections re rodent control (not by pest officers)	5,317	2.11
Inspection of agricultural units	5	0.00
	<u>251,768</u>	<u>100.00</u>



Total visits made by inspectors, including those engaged on certain special duties:—

		<i>% of total</i>
Visits by public health inspectors and technical assistants on district .. .. .	251,768	76.38
Visits by Shops Act inspectors:—		
Under Shops Act 1950 .. .. .	17,667	
Under Offices, Shops and Railway Premises Act 1963 .. .. .	5,943	7.16
Visits by rodent control inspectors .. .. .	16,616	5.04
Visits by food inspectors .. .. .	37,621	11.42
	<hr/> 329,615 <hr/>	<hr/> 100.00 <hr/>

### UNFIT HOUSES

The representation of unfit houses has continued during the year and it is anticipated that the original estimated number of unfit houses will be reached in a year or two. This, unfortunately, does not mean that the clearance of dwellings not fit for human habitation will be at an end. Constantly, old and not so old houses are reaching a stage where demolition is the only remedy although efforts are being made to conserve as many houses as possible by the service, on owners, of notices under Section 9(1) and 9(1) (a) of the Housing Act 1957. These notices specify the works necessary to be done to render the premises fit and a local authority is empowered to carry out these works itself should the owner fail to do so.

During the year 201 such notices have been served and 28 completed.

Under certain circumstances, and where improvement is to be effected at the same time, grants may be obtainable and owners are urged to take advantage of these.

### Clearance Areas

In 1971, 542 unfit houses were represented in 39 Clearance Areas bringing the total since 1955 to 31,406.

### Compulsory Purchase Orders, Clearance Orders, Public Local Inquiries

Four Public Local Inquiries have been held during the year covering 13 Orders involving 203 houses. Objections were received from owners, or their representatives, of 66 houses who stated that in their opinion the dwellings were not unfit. A list of the principal grounds which had led to their inclusion was supplied in each case.

Other Orders in which 62 houses were included were unopposed and confirmed without the holding of a public local inquiry.

## Certificates of Unfitness

In addition to those premises represented as unfit under the Housing Act 1957, 76 houses have been inspected for inclusion in various Certificate of Unfitness Orders made under the Land Compensation Act 1961.

## Advice to Enquirers

The number of enquiries dealt with in 1971 was 27,901.

## Individual Unfit Houses

It is necessary in the case of individual houses or parts of buildings to deal with these under Sections 16, 17 or 18 of the Housing Act 1957 and set out below is a summary of such action taken during the year:—

(1)	Houses represented as unfit for human habitation .. .. .	49
(2)	Owners' undertakings accepted:	
(a)	Not to relet for human habitation .. .. .	Nil
(b)	To make fit for human habitation .. .. .	5
(3)	Demolition Orders made .. .. .	16
(4)	Closing Orders made as demolition would affect adjacent buildings	9
(5)	Demolition following making of an Order or accepting an undertaking .. .. .	14
(6)	Houses made fit after representation (no Order made) .. .. .	1
(7)	Houses made fit after the making of Closing Orders .. .. .	4
(8)	Demolition Orders substituted for Closing Orders under Section 28	1
(9)	Parts only of buildings represented as unfit for human habitation ..	3
(10)	Closing Orders made on parts of buildings .. .. .	3
Total number of individual dwellings dealt with between September 1939 and 31st December 1971 .. .. .		2,444

## Housing Improvement and Improvement Grants

### HOUSING ACT 1964

### HOUSING ACT 1969

The effort which was made by officers of the Department to publicise the facilities and to advise the public concerning the availability and advantages of the improvement grant scheme bore fruit during the year and a total of 2,233 applications were received. This was an increase of 561 over the total for 1970 and the highest total received since the first improvement grant was paid 20 years ago—the previous highest total was 1,952 applications in the year 1961. The landlord applications increased by 278 and those from owner-occupiers were 283 more than in 1970. Landlord applications continued to

exceed those from owner-occupiers and amounted to 51 per cent of the total received. In order to encourage the up-grading of sub-standard houses a generous policy is followed in the making of discretionary grants so as to assist owners in the carrying out of repairs at the same time as improvement work. During the year a total of 1,733 grants were approved compared with a total of 1,410 in 1970—of this total approximately two thirds were discretionary grants.

## Applications for Improvement Grants during 1971

### DISCRETIONARY GRANTS

	<i>Formal applications received during the year</i>	<i>Applications approved during the year</i>	
	<i>Number of dwellings</i>	<i>Number of dwellings</i>	<i>Amount of grant which the Council have decided to pay</i>
(a) Conversions	152	141	£ 76,276
(b) Improvements by Landlords	824	575	227,249
By Owner-occupiers	616	366	105,748

### STANDARD GRANTS

	<i>Applications</i>		<i>Grants Paid</i>						
	<i>Received (No. of dwellings)</i>	<i>Approved (No. of dwellings)</i>	<i>(No. of dwellings)</i>	<i>Total Amount £</i>	<i>Number of amenities provided</i>				
					<i>Fixed bath or shower</i>	<i>Wash basins</i>	<i>Water supplies</i>	<i>Water closet</i>	<i>Sinks</i>
Improvements by Landlords	166	220	369	59,841	} 534	585	696	771	8
by Owner-occupiers	475	431	443	53,846					

84 applications for discretionary grants and 52 applications for standard grants were rejected.

During the year inspectors made 19,463 visits to houses in connection with Improvement Grants compared with 12,889 in 1970. A further 1,086 visits were made in connection with Improvement Area action.

Since the first improvement grant was paid in the City in 1952, £2,547,460 has been paid out in 20,591 grants made up as follows:—

Landlords .. .. .	6,810	£1,059,742
Owner-occupiers .. .. .	13,781	£1,487,718
	<hr/>	<hr/>
	20,591	£2,547,460
	<hr/>	<hr/>

Since the improvement schemes were operated 24,293 applications have been approved made up as follows:—

Owner-occupiers .. .. .	15,522
Landlords .. .. .	8,771
	<hr/>
	24,293
	<hr/>

### Compulsory Improvements—Tenants' Representations

A further 181 tenants exercised their rights under the Housing Act 1964 and wrote to the Corporation during the year asking them to use their powers to secure the provision of bathrooms by their landlords. However, the total figure of 1,748 tenants who have written so far since the introduction of the Housing Act 1964 occupy only a small proportion of the number of tenanted properties which are still without bathrooms. The following statistics show the action taken so far in regard to tenants' representations:—

Representations received (from August 1964) .. .. .	1,748
Rejected (property has insufficient life, etc.) .. .. .	128
Withdrawn (at tenants' request) .. .. .	9
Preliminary notices served .. .. .	1,179
Satisfactory undertakings received .. .. .	45
Immediate improvement notices served .. .. .	1,053
Improvement work completed .. .. .	657

### General Improvement Areas

Nine general improvement areas have now been declared under the Housing Act 1969 comprising some 5,605 houses. Three public meetings were held during the year in connection with the three areas declared in Handsworth, bringing the number of public meetings held to five. The residents of the areas responded well to the invitation to discuss the Corporation's proposals and all meetings were well attended. Lively discussion produced some alternative solutions from the residents and these have received or will receive very detailed study.



Each of the meetings was chaired by the Chairman of the Health Committee and at two of the meetings he was supported by the Chairman of the Public Works Committee, and by his representative at the third meeting. Other City Councillors also attended. Officers from each of the Departments represented on the Working Party of Officers were present to deal with questions. At the conclusion of each meeting those present were thanked for their attendance and assured that the suggestions and matters raised would be studied and, where possible, embodied in the final plans. An advice bureau, manned by officers, was opened on the nights following the public meetings to give residents full opportunity to express their personal views, ask questions and obtain detailed information about the effects of the proposals on their particular property.

A pattern is beginning to emerge. Residents within an area are glad to receive the Corporation's declaration of faith in their area. Although proposals to reduce the flow of through traffic in the areas is generally welcomed, there is strong opposition from those living in roads which are to remain unrestricted and which may be expected to take an even greater flow. There are many who would like to see through traffic prohibited altogether, regardless of the effect on other roads in the neighbourhood. Some welcome proposals for rear access for vehicular traffic, preferring to have cars off the streets in garages or parking lots at the rear of their houses, but other protest that if this means losing a strip of garden or an intrusion into their privacy, then it is too high a price to pay. Others believe that all costs incurred in providing off street parking and rear access, should be borne by public funds. These matters can only be resolved by discussions.

Owners are encouraged to invest in their houses and carry out repairs and improvements to a high standard. They are told of grants and loans available. Some feel that there should be compulsion so that all must play their part. Others state firmly that owners should be left to work out their own priorities as to what needs to be done and when.

The Chairman, at the close of each meeting, makes it clear that the Corporation and its officers are there to help and that they are willing to meet owners and occupiers to resolve difficulties. It is in the areas of shared responsibility—rear access ways, paved approaches, shared water service pipes and boundary fencing on private land, that most difficulties exist and most help is needed. Small group meetings are being held in an attempt to secure a generally acceptable solution.

From experience gained in the earlier areas, it is clear that progress is necessarily slow. Mains and services have to be checked and replaced where found to be inadequate. The laying of mains or sewers takes time and money. It is useless to resurface roads or footpaths before the risks of excavations are passed. One thing is clear, that owners are enthusiastic until they realise the very high cost to themselves of works of repair and improvement. Grants and loans help but still heavy cost falls on the owners. If the property is landlord owned there will, in most cases, be a substantial rise in rent to be met by the tenant. In some circumstances assistance is available to the tenant from public funds by way of rent rebate or social security benefits.

Many of the residents have lived in these areas for a long time. They appreciate the efforts of the Corporation to secure improvements to their homes and the environment, but some do not want the upheaval involved in house improvement, apart from the rent increase which would follow. It is pointed out to them that the alternative, a run down locality with eventual rehousing followed by slum clearance, may still involve a rent increase and perhaps greatly increased overheads, including travel expense to their familiar place of work.

The nine areas declared to be general improvement areas by the Health Committee are as follows:—

<i>Title of Area</i>	<i>Number of houses</i>	<i>Date of Public Meeting</i>
Birmingham (Summerfield No. 1) General Improvement Area	268	20.4.71
Birmingham (Summerfield No. 2) General Improvement Area		
Birmingham (Broadway) General Improvement Area	1,428	14.12.70
Birmingham (Handsworth No. 1) General Improvement Area	1,068	26.4.71
Birmingham (Handsworth No. 2) General Improvement Area	820	30.11.71
Birmingham (Handsworth No. 3) General Improvement Area	735	1.12.71
Birmingham (Stirchley No. 1) General Improvement Area	1,286	To be held 10.2.72
Birmingham (Stirchley No. 2) General Improvement Area		
Birmingham (Stirchley No. 3) General Improvement Area		

SUMMERFIELD; The response from owner-occupiers is reasonably satisfactory but landlords are still slow to improve their properties. Summerfield presented a challenge in that the houses were old and physically of poor quality. Much work of repair and improvement was necessary. A special drive was made in this area and owners and occupiers have been interviewed and schedules of work sent following a detailed inspection of each house.

The results of this activity to the end of the year were as follows:—

Of the 268 houses in the area 201 were inspected, 182 schedules were sent out and 95 improvement grant applications were received. At the end of the year at 12 houses work was in progress on improvement, 23 had been improved, which included the provision of 20 bathrooms, and notices had been served affecting 174 houses requiring the provision of an improved water supply. Nine notices had been served under Section 9(1A) of the Housing Act 1969 (which requires the owners to carry out repairs) and three representations had been received from tenants under Section 19 of the Housing Act 1964, requiring the provision of bathrooms.

## BROADWAY AND HANDSWORTH;

### *General Improvement Areas—*

	<i>Broadway</i>	<i>Handsworth</i>	<i>Handsworth</i>	<i>Handsworth</i>
		<i>No. 1</i>	<i>No. 2</i>	<i>No. 3</i>
Applications for improvement grants	49	52	18	14
Work in hand .. .. .	15	6	1	2
Work completed .. .. .	2	5	4	7
Tenants' representations received (Section 19, Housing Act 1964) ..	2	8	2	—
Number of notices served under Section 138 of the Public Health Act 1936 (insufficient water supplies)	6	6	11	—
Number of blocks affected .. ..	1	12	2	1
Number of houses affected .. ..	6	68	17	29
Number of notices sent (preliminary notices) .. .. .	6	56	17	—

In the Stirchley General Improvement Areas 108 houses had been inspected and schedules sent out and 25 applications for improvement grants had been received.

## Qualification Certificates

Part III of the Housing Act 1969 enables the landlord of a dwelling which is subject to a controlled tenancy under the provisions of the Rent Act 1968 to apply to the local authority for a certificate that the house satisfies certain conditions. On receipt of this qualification certificate the landlord may apply to the Rent Officer for the tenancy to be converted from rent control to rent regulation and to secure a phased increase of rent.

To obtain a qualification certificate the dwelling must satisfy certain conditions and possess all the standard amenities, be in good repair and fit for habitation.



In the case of dwellings which do not possess all the standard amenities the landlord in making his application must specify the works he proposes to carry out to provide missing amenities and, if the local authority is satisfied that the dwelling will then comply with the conditions, a certificate of provisional approval is issued. If the tenant consents to the improvement and the works are completed satisfactorily, a qualification certificate is finally issued. Almost all of the applications involving works to provide amenities have been combined with applications for standard or improvement grants towards the costs.

In the case of dwellings which would satisfy the conditions but for the presence of minor disrepair, letters are sent to landlords giving them opportunity to carry out such repairs before refusing an application.

The operation of this part of the Housing Act 1969 has involved the Department in considerable extra work and during the year inspectors made a total of 9,055 visits to properties which were the subject of applications for qualification certificates. In addition, much time and energy is spent in explaining to landlords, agents, tenants and others the steps to be followed. Landlords and their agents often complain that the procedure to secure a rent increase is too complicated—there may be some truth in this but they would do a lot to help themselves if they took the trouble to read the information pamphlets and literature available to them.

A further 2,964 applications were received bringing the total up to 6,871 since the Act came into force and at the end of the year the position was as follows:—

#### **Dwellings already provided with standard amenities**

	1971	Total
Applications received .. .. .	2,426	5,406
Applications refused .. .. .	1,142	1,939
Qualification Certificates issued .. .. .	1,102	1,278
Applications withdrawn .. .. .	136	256
Applications under consideration or awaiting the completion of works of repair at the end of year .. .. .		1,933

#### **Dwellings lacking standard amenities where improvement works are proposed**

	1971	Total
Applications received .. .. .	538	1,465
Applications refused .. .. .	4	8
Certificates of provisional approval issued .. .. .	397	975
Qualification certificates issued .. .. .	264	349
Applications withdrawn .. .. .	14	89
Applications under consideration at end of year .. .. .		44



## Certificates of Disrepair

A tenant of a house, which is subject to control under the Rent Act 1968 may apply for a certificate of disrepair if the landlord has either failed to carry out repairs which the tenant considers necessary or has declined to give an undertaking in accordance with the Act. Only three applications for certificates were received during the year but many calls were made on the Department for advice or help in the procedure to be followed to secure either the abatement of disrepair or a reduction in rent. In those cases where an inspection revealed the existence of a nuisance arising from disrepair, action was also taken under Section 93 of the Public Health Act 1936.

The following figures indicate the action taken in 1971:—

### *Part I—Application for Certificates of Disrepair*

1. Number of applications for certificates .. .. .	3
2. Number of decisions not to issue certificates .. .. .	2
3. Number of decisions to issue certificates .. .. .	1
(a) in respect of some but not all defects .. .. .	1
(b) in respect of all defects .. .. .	Nil
4. Number of undertakings given by landlords under paragraph 5 of the Ninth Schedule .. .. .	2
5. Number of undertakings refused by Local Authority under proviso to paragraph 5 of the Ninth Schedule .. .. .	Nil
6. Number of certificates issued .. .. .	1

### *Part II—Applications for Cancellation of Certificates*

7. Applications by landlords to Local Authority for cancellation of certificates .. .. .	11
8. Objections by tenants to cancellation .. .. .	Nil
9. Decisions by Local Authority to cancel in spite of tenant's objections	Nil
10. Certificates cancelled by Local Authority .. .. .	10
Number of visits made under the Act .. .. .	99
Number of re-visits made under the Act .. .. .	86

---

185

---

## Rent Restriction Acts

Part VI of the Rent Act 1968 continues the provisions relating to the rents of furnished lettings formerly contained in the Furnished Houses (Rent Control) Act 1946 and under Section 74 of the 1968 Act the Local Authority have a duty to maintain a Register of rents approved, reduced or increased by the Rent Tribunal. The Chief Public Health and Housing Inspector is Registrar for the City for the purposes of Section 74.

During the year 235 notifications were received from the Rent Tribunal, resulting in 140 entries being made in the Register maintained under the Act; ten certified copies of registered entries were issued to members of the public on payment of five pence in each case.

The provisions in Part II of the Rent Act 1965, which first authorised the setting up of Rent Assessment Committees and the appointment of Rent Officers, have also been continued by the Rent Act 1968. During the year a number of enquiries received in the Department relating to the assessment of a fair rent were referred to the Rent Officer.

## Houses in Multiple Occupation

A further three applications only were considered for the registration of houses newly intended to be used in multiple occupation bringing the total dealt with so far up to 236. Under the City of Birmingham (Registration of Houses in Multiple Occupation) Scheme 1965, houses must be registered if they are:—

- (a) Houses in which, on the 1st January, 1966, there were either more than two separate occupancies (including that of a person having an estate or interest in the whole house) or more than four individual lodgers—this is defined in the Scheme as a ‘1961 Act house’.  
or
- (b) Houses in which, after the 1st January, 1966, it is intended there shall be either more than two separate occupancies (including that, if any, of a person having an estate or interest in the whole house) or more than four individual lodgers—this is defined in the Scheme as a ‘1965 Act house’.

The registration of ‘1961’ Act houses’ is automatic on application and supplying of the necessary particulars. The registration of ‘1965 Act houses’ is not automatic and may be refused, or conditions may be attached to the approval.

At the end of the year there were 4,300 houses registered compared with 4,350 at the end of 1970. The following is a summary of action taken during the six years since 1st January, 1966, when the Scheme came into operation.

'1961 Act houses' remaining on the register .. .. .						4,225
(i.e. those already occupied so as to be registrable at 1st January, 1966)						
'1965 Act houses'						
(i.e. those intended to be newly let in multiple occupation)						
(a)	Registration approved .. .. .					75
(b)	Registration refused					
	(i) House unsuitable .. .. .				112	
	(ii) Use detrimental to locality .. .. .				17	
	(iii) Unsuitable person in control .. .. .				Nil	129
(c)	Applications not proceeded with .. .. .					32
(d)	Applications pending at end of year .. .. .					Nil
Total of applications						<u>236</u>

Legal action taken during the six years since the commencement of the Scheme involved the following cases:—

Failure to register '1961 Act houses' .. .. .	168 cases
	£475 fines
Failure to supply information and the establishing of '1965 Act houses' in contravention of the Scheme .. .. .	39 cases
	£452 fines
Appeals heard in county court against refusal to register '1965 Act houses' .. .. .	1 appeal—allowed

The spread of multiple occupation which created near slum conditions in quite extensive areas of the City continues to be checked and there is no doubt that the firm action taken under planning legislation has played a considerable part in this. During the year another 134 premises were referred to the City Engineer, Surveyor and Planning Officer for consideration under the Town and Country Planning Act 1962, bringing the total so far referred to 1,153 premises in respect of which the following action has been taken:—

Number of premises in respect of which enforcement action to discontinue was authorised .. .. .	673
Number of premises where the use in multiple occupation has ceased ..	465
Number of premises in respect of which no planning action was taken (use established or no change of use) .. .. .	241

In 124 cases the user appealed to the Minister against the enforcement action to discontinue, but 56 were withdrawn. Of the 68 heard so far, 39 appeals were dismissed, 17 were allowed and the decision on 12 is awaited.

Conditions in houses in multiple occupation in certain areas of the City continued to give rise to concern and statutory action was again necessary during the year, details of which follow:—

Notice under Section 170 of the Housing Act 1957, to ascertain details of ownership .. .. .	49
Management order made .. .. .	22
Notice of intention to give a direction to limit occupants .. ..	22
Direction given .. .. .	40
Notice under Section 15 of the Housing Act 1961 to require facilities ..	4
Notice under Section 90 of the Housing Act 1957 to abate overcrowding	6
Notice under Section 14 of the Housing Act 1961 to make good neglect of proper standards of management .. .. .	20
Notice under Section 19(9) of the Housing Act 1961 requiring information re occupancies .. .. .	80
Direction varied to permit an increased number of occupants .. ..	8

There has been further improvement in the position regarding multiple occupation in the City during the year and 50 previously registered houses have ceased to be so used. This reduction results from a number of factors—houses have been acquired by the Corporation in connection with redevelopment or road widening; immigrants' dependants have joined the householders and formed family households and sub-letting has ceased; some houses have been properly converted to flats. The number of houses suitable for conversion into separate dwellings is not large and in fact more than half of the houses on the register are really only suitable as single family houses.

The standard of management of houses has also improved and although, as indicated above, some statutory action was taken, this was on a very much reduced scale to about a third of the action found to be necessary in previous years.

The question of students' lodgings has given rise to concern and some action by this local authority followed an increase in the practice of letting furnished houses on a single tenancy basis to groups of individuals. Owners of property have found it very lucrative to let off houses in this way—rents as high as £90 per month for a small furnished terrace house have been noted. One individual is named as the principal tenant and he or she is responsible for



forming their own household who contribute to the expenses of running the house and allegedly live as one "family". The use of a small terraced house in such occupation sometimes gives rise to complaints by neighbours who are disturbed by noise, from cars, motorbikes and other activities in which groups of healthy young students may participate.

When complaints are received they are investigated and endeavours made to resolve the matter amicably. Control under the multiple occupation provisions of the Housing Acts is difficult as occupation by persons who form a single household is not deemed to be multiple occupation under these Acts. However, if conditions warrant it the case is referred to the City Engineer, Surveyor and Planning Officer for investigation from a planning viewpoint. (A High Court judgement following an appeal by the Corporation in 1963 ruled that multiple paying occupation could be deemed development for which planning permission is required.) There have been three appeals to the Minister for the Environment following enforcement action under planning legislation and in dismissing each one the Minister indicated that he supported the Corporation's view that

(a) depending on facts, occupation by unrelated persons, even though they form one household, may under planning law be considered multiple paying occupation and development for which permission is required,

(b) certain small houses in residential areas are only suitable for single family occupation and should not be used for this form of multiple paying occupation.

The cases received plenty of publicity and it was felt advisable to have meetings with the lodgings wardens and bursars of the universities and colleges to discuss the problem. In reply to the accusation that the local authority was being unfair to students it was pointed out that the Corporation had a difficult task and must hold the balance between the established needs and amenities of residents and the desire and necessity for some students to live outside the campus. The view was expressed that the better form of student accommodation outside the campus was that provided by landladies who could provide the alternative to a home with facilities for study together with care and supervision. Up to four students could be accommodated as lodgers without requiring permission or registration. This might not suit the tastes or needs of every class of student some of whom may wish for more independence and their own accommodation and the lodgings wardens were advised that, provided the house and locality were suitable, planning permission would be given for the accommodation of students either by way of hostels, lodgings or in some form

of multiple occupation. It was emphasised however that students could not be treated as a special or privileged class while there existed a large housing need in the City involving families and children at all social levels.

To summarise the action taken by this Department since the coming into operation of the Housing Act 1961, until the end of 1971, the following details are given:—

	<i>No. of premises</i>
Directions given to limit occupants .. .. .	2,435
Management orders made applying management regulations .. ..	1,230
Notices served requiring provision of facilities under Section 15 of the Housing Act 1961 .. .. .	1,772
Control orders made and houses taken over in order to protect occupants under Section 73 of the Housing Act 1964 .. .. .	4
Legal proceedings for failure to maintain proper standard of management, to abate nuisances and overcrowding, to provide information and rent books, and offences against direction limits;	
Number of cases .. .. .	3,195
Penalties imposed:	
Fines .. .. .	£21,233
Imprisonment .. .. .	1 case 2 months
Work carried out by Department at default or request to comply with notices served under the Public Health and Housing Acts	
Jobs completed .. .. .	1,307
Cost of works .. .. .	£92,922

## Abatement of Nuisances

The nuisance provisions of the Public Health Act 1936 as extended by the Public Health (Recurring Nuisances) Act 1969 continue to be extensively used in dealing with complaints received in the Department from the public. Every complaint which is received, by telephone, letter or through callers at the Department or its Divisional Offices, is investigated and, where appropriate, action is taken. Increasingly, use is being made of the informal approach to secure the co-operation of those responsible. A letter couched in suitable terms often achieves a quick result, but if on a follow-up visit work is not found to have been carried out, formal action is taken through the Health Committee and a notice is served under the nuisance provisions of the Public Health Act 1936. If a formal notice is not acted upon in a reasonable time, action is taken through the Magistrates' Court, either to secure a nuisance order which enables the Corporation to carry out the work at default, or for a penalty, or both. Although a number of cases were taken to the Courts the majority of nuisances were abated within a reasonable time after the service of a notice.

During the year a total of 3,482 nuisance notices was served, 1,005 being informal preliminary notices whilst 2,477 were statutory notices served under the provisions of the Public Health Acts and the Birmingham Corporation Acts.

The total of 2,477 statutory notices was made up as follows:—

Nuisances under Section 93 of the Public Health Act 1936—dealing mainly with roofs, spoutings, fallen plaster, defective floorboards, broken sashcords and window frames. . . . .	1,188
Stopped up drains, soil pipes, water closets and private sewers, dealt with under the Birmingham Corporation Act 1946, as amended by the 1954 Act . . . . .	543
Urgent nuisances, badly leaking roofs, broken water closets, pedestals, etc., dealt with under Section 26 of the Public Health Act 1961 . .	357
Provision or improvement of piped water supply—Section 138, Public Health Act 1936, as amended by Section 30, Water Act 1945 . .	177
Yard paving and drainage—Section 56, Public Health Act 1936 . .	48
Unsatisfactory drainage—Section 39, Public Health Act 1936 . .	149
Filthy or verminous premises—Section 83, Public Health Act 1936 . .	1
Removal of noxious matter, Section 79, Public Health Act 1936 . .	8
Bye-law infringements—nuisances . . . . .	—
Replacement of earth closets, etc.—Section 47, Public Health Act 1936	—
Additional water closets—Section 44, Public Health Act 1936 . . . .	6
	<hr/>
	2,477
	<hr/>

## Urgent Nuisances

The powers contained in Section 59 of the Birmingham Corporation Act 1946, continue to be used to require the clearing of obstructed drains, waste pipes and water closets. The powers are similar to those in Section 22 of the Public Health Act 1961, but work can be carried out at default of an owner after 24 hours' notice compared with 48 hours required by the 1961 Act.

Action was taken as follows:—

### *Birmingham Corporation Act 1946—Section 59*

(Defective drains requiring urgent attention)

Total number of notices served during 1971 (involving 457 jobs) . .	543
Work carried out by owners in specified time . . . . .	253
Orders given by this Department in default of owners' compliance . .	182
Orders given by this Department at request of owners . . . . .	34
Payments to the Department's contractors . . . . .	£2,923·65
Average cost per job . . . . .	£14·33
The maximum charge in respect of any job was . . . . .	£240·12
and the minimum was . . . . .	£1·83

During the year notices were served in respect of obstructions in 16 private sewers affecting 113 houses.



For many years action to remedy urgent nuisances has been taken under Section 32 of the Birmingham Corporation Act 1948. Almost identical power is now given in the Public Health Act 1961, and from the 17th July, 1964, notices were served under Section 26 of the National Act.

## Public Health Act 1961—Section 26

(Defective houses requiring urgent attention)

Total number of notices served during 1971 (involving 333 jobs)	..	357
Work carried out by owners in specified time	.. .. .	228
Orders given by this Department in default of owners' compliance	..	105
Orders given by this Department at request of owners	.. .. .	13
Payment to the Department's contractors	.. .. .	£3,115.69
Average cost per job	.. .. .	£29.67
The maximum charge in respect of any one job was	.. .. .	£262.80
and the minimum was	.. .. .	£1.50

## Enforcement Section

This Section is responsible for the legal enforcement of the Department's obligations and duties as detailed by the various Acts of Parliament, Regulations, Orders and Bye-laws delegated to the Health Committee by the Birmingham City Council.

The institution of legal proceedings, in liaison with the Town Clerk's Department, is an important undertaking which requires the accurate preparation of evidence necessary for prosecutions to be successfully conducted and the careful collation of information of every description for these prosecutions.

When these proceedings are brought before the City Magistrates at Victoria Law Courts, Corporation Street, the Enforcement Officer is present to assist and advise the Corporation's Prosecuting Solicitor. This is essential as the majority of the defendants now appear at Court or are legally represented and keenly contest each case.

Legal proceedings were instituted during the year in 454 instances and details of the summonses issued (under the various Acts of Parliament, Regulations, Orders and Bye-laws) are indicated in the following analysis:

Summonses taken out during 1971						Summonses	Fines £
<i>Public Health Act 1936</i>							
General nuisances	..	..	..	..	..	73	—



	Summonses	Fines
<i>Food and Drugs Act 1955</i>		
Section 2: Selling food not of the nature, substance or quality demanded by purchaser ..	7	195
Section 8: Selling, offering or having in possession for purpose of sale food which is unfit for human consumption .. ..	3	80
Section 32: Adulteration of milk by adding water..	3	175
<i>Milk and Dairies (General) Regulations 1959</i>		
Regulation 27(1): Dirty milk bottles .. ..	15	125
<i>Food Hygiene (General) Regulations 1960 and 1970</i>		
Dirty, defective or insufficiently equipped premises and offences in connection with handling of food		
1960 .. .. .	90	1,155
1970 .. .. .	106	929
<i>Food Hygiene (Markets, Stalls and Delivery Vehicles) Regulations 1966</i>		
Dirt, disrepair, lack of sufficient equipment and offences in connection with handling of food ..	23	104
<i>Noise Abatement Act 1960</i>		
Section 2(3): Playing of chimes from loudspeakers after permitted hours .. ..	4	10
<i>Housing Act 1957</i>		
Section 170: Requiring information as to ownership of premises .. .. .	9	—
<i>Housing Act 1961</i>		
Section 19(2): Direction to prevent or reduce overcrowding of houses let in multiple paying occupation .. .. .	26	285
Section 19(9): Requiring statement of number of lets to families and individuals in houses let in multiple occupation ..	6	—
<i>Housing Acts 1961 and 1964, Birmingham Corporation Act 1965 and Scheme</i>		
Section 22: Registration of houses let in multiple occupation:—		
‘1961 Act Houses’ .. .. .	3	—
‘1965 Act Houses’ .. .. .	2	50
<i>Housing Act 1964</i>		
Section 65(1): Failure to execute works under Section 14 of the Housing Act 1961 ..	10	140
Failure to execute works under Section 15 of the Housing Act 1961 ..	5	20

	Summonses	Fines
<i>Housing (Management of Houses let in Multiple Occupation) Regulations 1962</i>		
Failure to maintain good standard of management	1	10
<i>Landlord and Tenant Act 1962</i>		
Sections 1 and 4: Failure to provide rent books ..	2	20
<i>Offices, Shops and Railway Premises Act 1963</i>		
Section 18: Avoidance of exposure of young persons to danger in cleaning machinery (Bacon slicer) .. ..	1	50
<i>Clean Air Act 1956</i>		
Section 1: Prohibition of dark smoke from chimneys .. .. .	1	25
<i>Clean Air Act 1968</i>		
Section 1: Prohibition of dark smoke from industrial or trade premises ..	35	535
<i>Shops Act 1950</i>		
Section 2: Open after permitted hours.. ..	11	55
Section 47: Sunday trading (Closing of shops on Sunday) .. .. .	15	110
<i>Late Night Refreshment Houses Act 1969</i>		
Section 7: Keeping open a licence or in breach of conditions of licence .. ..	3	120
	<hr/> 454	<hr/> 4,193
	<hr/>	<hr/>

The Magistrates made nuisance orders in 12 cases. In the case of other prosecutions taken under the general nuisance procedure of the Public Health Act 1936, work was either completed or in hand at the time of the Court hearings.

A further function of this Section is arranging for execution of all works required to comply with the various statutory notices served under the delegated Acts of Parliament and nuisance orders made by the City Magistrates at Victoria Law Courts.

These works have been of a varied nature and have included the removal of large accumulations of rubbish, general property repairs, provision of new water supplies, drainage and paving works, works in houses let in multiple occupation and the provision of bathrooms and internal water closets by out-building conversion or construction, and bedroom conversion.

The total cost of works carried out during the year was £9,462·23.

The following analysis indicates the work arranged for by this Section during 1971:—

	<i>Jobs</i>	<i>Houses</i>	<i>Cost</i> £.p.
<i>Section 93, Public Health Act, 1936</i>			
<i>General nuisances—repairs to defective houses.</i>			
At default of owners—for non-compliance .. .. .	7	7	548.81
By agreement .. .. .	17	19	1,499.86
<i>Section 56, Public Health Act 1936</i>			
<i>Paving of courts, yards and passages.</i>			
At default of owners .. .. .	1	6	52.44
<i>Section 39, Public Health Act 1936</i>			
<i>Provision of satisfactory drainage.</i>			
At default of owners .. .. .	9	41	192.11
By agreement .. .. .	7	8	213.85
<i>Section 138, Public Health Act 1936</i>			
<i>(as amended by Section 30 Water Act 1945 and Section 78 Public Health Act 1961)</i>			
<i>Houses already having internal water supply but where supply was insufficient—improvement effected.</i>			
At default of owners .. .. .	9	65	2,519.97
By agreement .. .. .	9	32	1,139.43
<i>Section 19, Housing Act 1964</i>			
<i>Provision of bathrooms, water closets together with other amenities, by outbuilding and bedroom conversion.</i>			
At default .. .. .	5	5	1,781.00
<i>Section 4, Prevention of Damage by Pests Act 1949</i>			
<i>Works carried out to prevent rodent infestation.</i>			
At default .. .. .	10	10	299.99
By agreement .. .. .	2	2	72.37
<i>Section 26, Public Health Act 1961</i>			
<i>Abatement of urgent nuisance.</i>			
By agreement .. .. .	1	1	68.50

	Jobs	Houses	Cost £.p.
<i>Section 9, Housing Act 1957</i>			
<i>Repair of unfit houses capable of being rendered fit at reasonable cost.</i>			
By agreement .. .. .	1	1	271.00
<i>Miscellaneous</i>			
Works executed on behalf of the Health Committee .. .. .	2	2	802.90

During the year a number of owners and owner-occupiers, because of financial difficulties, were unable to make payment in full of the cost of the works which they wished to be carried out on their behalf and have approached the Department for assistance to carry out the repairs to property to comply with statutory notices served on them or in the case of owner-occupiers, to obtain help to carry out essential repairs to their homes. These enquiries came particularly from old-age pensioners, elderly widows and other persons in distressed circumstances.

In each case where help is requested, the owner or owner-occupier submits to the Department a written request asking the Department to carry out the works detailed on the statutory notice and to submit a demand on completion for payment of any expenses incurred. Arrangements for the execution of the required works are then made by the Enforcement Officer, usually by competitive quotations, and an order is placed with a suitable building contractor.

On satisfactory completion of the works a demand is sent for payment of the cost incurred. The person concerned is then asked to submit an offer for repayment of these expenses to the Secretary-Accountant of the Department for consideration. It is the normal policy of the Health Committee to require payments to be spread over a period of three years by monthly or quarterly instalments. In cases of extreme hardship the period of repayment would be extended or an application can be made to the Committee for a charge to be made on the property during the lifetime of the owner or until such time as the property changes hands. An interest charge, at present of 7 per cent is made on the outstanding amount.

Under the Housing Act 1964 an occupier of a house may make representation to the Corporation, asking them to use their powers under this Act to require the owner of the property to provide a bathroom by outbuilding construction or by conversion of a bedroom. In such cases an immediate improvement notice is served requiring the execution of the works detailed on the notice



to provide a bathroom within twelve months from the operative date of the notice. Where the owner fails to carry out the requirement of this immediate improvement notice enforcement procedure is taken. A notice of intention is then served in accordance with the provisions of Section 28 of the Housing Act 1964, giving not less than 21 days' notice of the intention of the Corporation to carry out the works required. The service of this notice of intention usually makes the owner take action and results in early application being made for an improvement grant and provisional qualification certificate to enable a fair rent to be negotiated for the house by the Rent Officer, the owner and the occupier. During the year 1971 46 notices of intention were served and works to provide bathrooms were carried out at default in 5 cases.

When a standard grant or an improvement grant is made under the Housing Act 1969 the Local Authority may execute the approved works of improvement by agreement and at the expense of the owner without a statutory notice being served, and has power to advance money under certain conditions for these approved works and agree for the loan to be repayable at the end of a fixed period or on maturity. Interest is charged on the loan, the current rate being 8 per cent. The loan in these cases is normally made by the City Treasurer and a deed of assignment is given by the owner or owner-occupier concerned to assign the amount of the improvement grant and the loan from the City Treasurer direct to the Department for payment of the cost of these works.

### **Common Lodging Houses**

Section 237 of the Public Health Act 1936 lays upon every local authority the duty of maintaining a register of all common lodging houses established in their district. This record must contain detailed information pertaining to the full names and addresses of all persons registered as "keepers" and "deputy keepers", the situation of the lodging house and the maximum number of persons which each may accommodate.

The position has not changed and there are still four such premises registered providing a total accommodation for 431 men only. There is a positive demand for this type of accommodation by certain single men or workers away from home and hostels are almost always fully occupied.

Conditions at these houses are controlled by bye-laws and routine visits are carried out by public health inspectors, both by day and night, to ensure that no infringements of the above Act or Bye-laws occur.

During the year the following visits were made and at all four lodging houses conditions were found to be satisfactory:—

Day visits	..	..	..	..	..	..	12
Night visits	..	..	..	..	..	..	68
Special visits	..	..	..	..	..	..	8
							—
					TOTAL	..	88
							==

## Tips and Tipping

A total of 823 visits was made to established tips during the year in order to see that the City Bye-laws on tipping were being observed.

The general standard of controlled tipping was quite good but nuisances arose from fly-tipping both on and in the vicinity of established tips and it was necessary to request operators of tips to increase their security arrangements. The co-operation of the police was also sought in an endeavour to trace offenders. Trouble also arose on tips from trespassers and children starting fires and on a few occasions, mostly at weekends, it was necessary to call out the fire brigade.

A Salvage Department tip in the west of the City provides a vital reserve to the refuse collection service in case of mechanical breakdown at refuse destructor plants but its proximity to recent housing developments is disturbing and the greatest care in operation of the tip has to be taken when it is brought into emergency use.

At two private sites tipping has been completed and the process of settlement and levelling is progressing.

The bulk of complaints concerning tipping, however, continued to be in respect of the depositing of rubbish and discarded articles on vacant sites and streets in the City and many complaints were concerning abandoned vehicles. Part III of the Civic Amenities Act 1967, which gives a local authority special powers to deal with this, is delegated to the Public Works Committee in respect of refuse, including vehicles, deposited on the highway or public car parks, and to the Salvage Committee, in respect of refuse, including abandoned motor vehicles, deposited on land elsewhere.

Where it was not possible to deal with the depositors of the refuse or the owners of the site the complaints were referred to the appropriate Department and it is once more pleasant to record the ready co-operation and speed with which the staff of the Salvage Department and the Public Works Department dealt with the complaints and removed the rubbish.

## Canal Boats

During the year 1971 the number of boats inspected within the City was 38 and the number of inspections each quarter was as follows:—

<i>1st Quarter</i>	<i>2nd Quarter</i>	<i>3rd Quarter</i>	<i>4th Quarter</i>
12	10	2	14

The 38 boats inspected were registered for the accommodation of 156 persons and when inspected were found to be carrying 24 men, 23 women and 9 children; a total of 56 persons.

All the boats were in good condition and conforming with the Act and Regulations. No complaint notes were issued during the year and four were brought forward from 1970, leaving an outstanding balance of four.

It has not been necessary to take any legal proceedings under the Public Health Act 1936 and the Canal Boat (Amendment) Regulations 1925.

No cases of infectious diseases affecting canal boat personnel were reported during 1971.

The total number of boats now registered in Birmingham is 104, 61 being motor boats and 43 ordinary boats.

## Prevention of Damage by Pests Act 1949

The specific functions of a local authority are laid down in Part I of this Act and it also requires the occupiers of any land (the definition "land" includes premises) to notify the local authority of the presence of rats or mice in or on their properties. Notifications of infestations were received from the public on 12,340 occasions during the year. Many of these complaints referred to rats in gardens or rats crossing gardens. Numerous people regularly feed rats in their gardens, simply by putting food out for birds. Rats become tame and make nests under garden sheds. The very person who feeds the birds may be astonished to see rats in the garden and complain to the Department that the Corporation should take action. In addition to taking steps to kill the rats, advice is given to bird lovers to use a properly designed bird table thus keeping the food off the ground and out of reach of rats.

Infestations continue to arise in the new developments all over the City—many of the infestations being caused by defects in the drainage systems of the new properties, and also by the presence of disused drainage systems of the now demolished older properties. This is quite common where the properties are built on former slum clearance areas.



The complaints received in the Department resulted in the inspection of 16,616 properties. Comparative figures for the previous years are as follows:—

	1968	1969	1970	1971
Notifications . . . .	9,426	13,231	12,564	12,340
Inspections (visits and re-visits) . .	11,100	16,687	15,301	16,616

As a result of these inspections, treatments were found to be necessary in 9,983 instances (6,376 rats, 3,607 mice).

Formal action, as defined in Section 4 of the Act, had to be carried out in 74 instances during the year.

All purely domestic premises are treated free of cost to the occupiers, whilst in the case of industrial premises of all types a charge has to be made.

The usual quota of difficulties has been encountered in the treatment of some properties, particularly the multi-let type of property, where in many instances each room is a separate "let", the tenants keeping the doors locked whilst they are out working, shopping, etc. Other tenants have refused treatments because of their fears that the poisons used would be dangerous to their children or pets.

It is extremely difficult to convince many people that the infestation is not of rats in the house but, in fact, is an infestation of mice. The reason given for this reasoning is "that the noise the tenants hear is much too loud for mice to make".

Many cleared areas of the City become in quite a short time rubbish dumps and this gives great encouragement to the rat to nest and harbour on such sites. In these instances the rat usually emerges above ground from the disused drainage systems of the demolished properties, which have been left in connection with the local sewers.

The scheme which was introduced by the Health Committee in 1970 whereby a pest officer is attached to each district and works on a geographical area has worked well. This officer is now responsible for the investigation of complaints and the treatment of premises with suitable bait. There has been continuity, with a growing personal interest in the problems of the area. The scheme has also made for greater flexibility as the pest officer is able to draw in the District Public Health Inspector and his team in times of emergency and in those cases where proofing of premises is necessary.



## SALVAGE DEPARTMENT REFUSE DISPOSAL WORKS

The refuse disposal works are called upon to deal with approximately 287,000 tons of refuse annually, the refuse being dealt with by incineration. The very nature of the work of refuse disposal makes all of the works liable to rat infestations. In a number of instances rats have been seen to be tipped from the vehicles into the hoppers at the various works. Very heavy rat infestations have been encountered in the works, but over the years continuous action has drastically reduced the numbers of rats; nowadays the infestations being mostly confined to specific parts of the works, such as the hoppers, surrounds of the firing decks, etc., in the older works.

**Brookvale Road Works** These works finally closed down in the autumn when the new works at Perry Barr were opened. Permanent poison points had been maintained all over the works, particular attention being paid to the bank of the canal, and the canal arm, etc. As a result of these activities over the past four years, the rat population when the works closed was nil.

**Lifford Works** The face of the tip, fitting shop, electricity supply sub-station have had permanent points of poison maintained, the poison points being renewed when necessary.

**Tyseley Works** These works have had permanent poison points maintained in various portions of the depot. In late summer a rat infestation arose on the face of the tip. Immediate action was taken and over 40 lbs of poison (anticoagulant) was eaten by the rats in a week—the infestation was cleared. A treatment of mouse infestation in the canteen kitchen was also cleared with anticoagulant, and permanent poison points maintained behind and beneath various fittings in the kitchen.

**Perry Barr Works** These works opened in the autumn and a precautionary treatment was carried out in various parts of the works. The infestation was very slight.

**Rotton Park Street Works** The canteen kitchen had to be treated for mouse infestation; in this instance the mice had been “imported” in cases of eggs. The rat infestation in the works was at an absolute minimum. The works had to be closed during December due to the dangerous condition of the chimney stack. Demolition of the stack was instituted immediately and it is not expected to be rebuilt. The works will then become a “transfer depot”; no incineration will be carried out in the future. The refuse will be sorted and tatted for salvage and then transferred to another works for final disposal.

**Castle Bromwich Works** Rat infestations have arisen in various portions of these works during the year. Permanent poison points are maintained in many parts, the rat infestation thus being kept to a minimum, particular attention being paid to land beneath the ramp to hopper shed, electricity supply sub-station and land adjoining the railway line.

**Montague Street Works** Various portions of these works have been poisoned during the year, such as the fitting shop, garage, tat shed, canal arm, etc. The rat infestation present in these works has been very considerably reduced over the years and many parts of the works are now clear of infestation. However, the hoppers still support a fair rat population, these being dealt with in rotation, when the hoppers are cleared and when obtaining live specimens for the laboratories of the Ministry of Agriculture, Fisheries and Food.

**General** The staff at all these depots of the Salvage Department are very rat conscious, and any untoward rise in the rat population is notified by them to this Department. Immediate action is taken in these circumstances.

The treatments undertaken at the various depots during the period of the dustmen's strike showed astonishing results in the number of dead rats seen after the treatments, and in the main the rat population had been reduced so much that the sight of a rat became a talking point with the men at the depots.

#### SEWER TREATMENTS

Practically all the manholes on the sewers within a four mile radius of the City Centre were poisoned during the year. This work was undertaken by a contractor, a direct poison (Fluorokil) being used. It was not possible to assess the efficacy of the treatment as the contract price did not allow for the examination of takes of poison.

#### Pigeon Control

There has been a very noticeable drop in the feral pigeon population during the year, particularly in the flocks in the City Centre, Aston, Newtown and the Hockley districts.

Considerable damage to property is done by the pigeon and it was very obvious in one block of shop property where quite a number of roof slates were broken and displaced by the birds, who thus provided themselves with night roosts in the attic ceilings of the shops. These attics are in the main disused. At another site (Corporation houses) six broken roof tiles appeared on the roof over a period of about 4/5 months. One of the tenants in the houses was in the habit of regularly feeding the birds several times a day and the pigeon population had grown over the year to about 75 pigeons.

A further site provided evidence of possible danger to the public arising from pigeons. Here a feral pigeon population of approximately 250 to 300 birds was observed in 1969. During the year the properties became void and were neglected. The weight of the birds and their droppings caused a length of some 8 feet of gutter to fall to the ground in proximity to a bus stop.

The humane control of the pigeon population by the use of suitably sited cage traps continued. 725 birds were caught by this method during the year.

A further 1,107 birds were recovered by the use of bait containing narcotic. The staff and the contractor engaged in the use of this are licensed by the Ministry of Agriculture, Fisheries & Food. Competition from elderly ladies feeding the birds on one site made control by this method virtually ineffective for a time until the ladies responded to persuasion and the birds, being deprived of a regular meal, dispersed.

### **The Rag Flock and Other Filling Materials Act 1951**

There has been no change either in the number of premises registered under section 2 of the Act during the year, the figure remaining at 22, or in the number of premises licensed for the storage of rag flock under sections 6 and 7 which remains at three.

Four informal samples were taken during the year all of which proved satisfactory.

Algerian fibre .. ..	1	Cotton mixture felt ..	1
Coir fibre.. ..	1	Hair .. ..	1

In the interests of public health new Regulations operative from 3rd November 1971 extend considerably the categories of filling materials and revise the sample tests and standards of cleanliness.

### **Supervision of Offices, Shops and Railway Premises**

#### **SHOPS ACT 1950**

Four whole-time Shops Act Inspectors are employed throughout the year on general routine inspections and the various other duties relating to the distributive trade as prescribed by the Shops Act 1950 and the Offices, Shops and Railway Premises Act 1963.

These duties briefly include the general inspection of all retail and wholesale premises and the checking of conditions of employment together with staff accommodation. They also comprise the enforcement of early-closing day and night closing provisions and the law in relation to Sunday Trading.



The work of the Shops Act Inspectors for the year is summarised as follows:—

#### GENERAL INSPECTIONS

Visits—Shops Act 1950 (including Sunday and night visits)	..	..	17,667
Visits—Offices, Shops and Railway Premises Act 1963	..	..	5,943
			<u>23,610</u>

#### STREETS PATROLLED

Half-day, night closing and Sunday trading	..	..	..	9,623
--	----	----	----	-------

#### OFFENCES REPORTED

##### Half-day closing:

Sales after closing time	..	..	..	..	..	20
--------------------------	----	----	----	----	----	----

##### Night closing:

Sales after closing time	..	..	..	..	..	17
--------------------------	----	----	----	----	----	----

##### Sunday trading:

Illegal sales	..	..	..	..	..	47
---------------	----	----	----	----	----	----

Warning letters sent	..	..	..	..	..	54
----------------------	----	----	----	----	----	----

##### Legal proceedings where warning letters have been ignored:

##### General closing hours—

Motor traders	..	..	..	..	..	10
---------------	----	----	----	----	----	----

##### Sunday trading—

Motor traders	..	..	..	..	..	6
---------------	----	----	----	----	----	---

Furniture traders	..	..	..	..	..	5
-------------------	----	----	----	----	----	---

Market stall traders	..	..	..	..	..	5
----------------------	----	----	----	----	----	---

26

The cases against the market traders arose out of the opening of a Sunday market on a privately owned car park. The market organisers had been warned previously that the holding of such a market would almost certainly contravene the provisions of the Shops Act 1950 which places a restriction on the type and nature of goods which may be sold on Sundays and that without the Corporation's permission the holding of such a market would also infringe the provisions of the Birmingham Corporation (Consolidation) Act 1883 which gives sole rights to the Corporation to hold markets within the boundaries of the City. The market, however, was held on Sunday, 17th October in defiance of



these warnings and advice. Subsequently a High Court action was initiated by the Corporation in defence of their market rights and an interlocutory injunction was granted against the market organisers preventing them from holding further markets.

#### OFFICES, SHOPS AND RAILWAY PREMISES ACT 1963

This report covers the seventh complete year's working under the Act and supporting Regulations. The total number of premises registered at the end of the year was 13,401, representing a decrease of 62 when compared with the total of 13,463 for 1970. This small decrease is again due to the large number of cancellations recorded during the year, which amounted to 676 and after accounting for 614 new registrations.

A further 4,108 general inspections have been carried out during the year of which 614 were in respect of new registrations and 3,494 were repeat inspections of previously registered premises.

Both the total number of males and females employed at the end of the year have increased by 947 and 1,244 respectively, to a combined total of 112,456. This figure shows an overall increase of 2,191 persons employed when compared with the combined total of 110,265 for 1970.

The following statistics show the number and class of premises registered, the number of employed persons and the number of general inspections carried out during the year:—

<i>Class of premises</i>	<i>Premises newly registered during the year</i>	<i>Total registered premises</i>	<i>Total persons employed</i>	<i>General inspections during the year</i>
Offices .. ..	298	4,773	57,664	1,578
Retail .. ..	266	7,116	37,160	2,004
Wholesale .. ..	23	601	10,207	110
Catering .. ..	27	895	7,344	415
Fuel storage .. ..	—	16	81	1
TOTALS .. ..	614	13,401	112,456	4,108

The number of inspectors appointed under Section 52 of the Act is 85. The total number of visits of all kinds made by inspectors to registered premises amounted to 9,009 for the year, which represents a decrease of 3,212 when compared with the figure of 12,221 for 1970. These visits resulted in the service of 221 preliminary notices dealing with the main requirements of the Act. In the same time, the works specified on 202 preliminary notices were completed to the satisfaction of the Department.

Following statutory examination of lifts and hoists under the Hoists and Lifts Regulations there were 123 adverse reports received of which, in 56 cases, repairs had been effected by the end of the year. This was an improvement over 1970 but there is no doubt that lift engineering companies are still under considerable pressure in dealing with outstanding orders for repairs.

### Notifiable Accidents

Information was received on 299 "notifiable" accidents which is a decrease of 56 when compared with the figure of 355 for the previous year, and it was considered necessary to investigate 65 of these cases. Information was also received on a further 57 accidents which were not notifiable.

An accident occurred in April involving a youth aged 17 years employed as a shop assistant. The youth was cleaning a hand-operated bacon slicer which is listed as a dangerous machine for the purposes of the Act. At the time of the accident the injured youth was wiping the blade with a cloth. The blade had just been sharpened and his hand slipped, resulting in a badly cut thumb. The circumstances of the accident were fully investigated and it was considered there had been a contravention of Section 18 of the Act which provides that no "young person" shall clean such machinery, and young person is defined as a person who has not attained the age of 18 years. Legal proceedings were authorised and at the court hearing the magistrate found the offence proved and imposed a fine of £50.

Below is an analysis of the principal causes or factors involved in the notifiable accidents:—

Accidents involving:							
Machinery .. .. .	..	..	..	..	..	..	19
Transport .. .. .	..	..	..	..	..	..	12
Falls of persons .. .. .	..	..	..	..	..	..	114
Stepping on or striking against object or person							22
Handling goods .. .. .	..	..	..	..	..	..	56
Struck by falling object .. .. .	..	..	..	..	..	..	32
Fires and explosions .. .. .	..	..	..	..	..	..	2
Electricity .. .. .	..	..	..	..	..	..	—
Use of hand tools .. .. .	..	..	..	..	..	..	17
Not otherwise specified .. .. .	..	..	..	..	..	..	25
TOTAL ..							299

## **Infectious Diseases**

Visits made by public health inspectors in connection with enquiries into cases of food poisoning and certain infectious diseases totalled 7,106 for the year; this figure includes those visits made to obtain specimens for bacteriological examination.

A further 3,572 visits were made in connection with the arrival of immigrants—See page 45.

## **Disinfestation and Disinfection**

The Public Health Clinic and Baths is operated under the supervision of a Depot Superintendent, who reports daily to the Chief Public Health and Housing Inspector. The station is situated in Bacchus Road, Winson Green, and occupies a fairly central position in Birmingham.

The public health inspector promptly investigates all complaints of infestation by bugs, fleas, flies, cockroaches, blackbeetles, crickets, ants, etc., received by the Department from the occupiers of domestic and business premises. After investigation, the necessary arrangements for treatment are made with the Depot Superintendent.

During the year, 1,246 houses received such treatment as compared with 1,686 in 1970, representing a decrease of 440 treatments. Work is also carried out in business premises, hospitals, licensed houses and restaurants, schools, factories and public baths. Steam flies and cockroaches continue to be the main source of infestation in kitchens and food preparation premises. The number of treatments effected in premises, as above, amounted to 188 for the year, which is a slight increase of two, when compared with the previous year.

Charges are not made for treatments to domestic premises, but appropriate accounts were submitted in other cases, based solely on the cost of labour and materials used.

## **SERVICES TO THE TUBERCULOUS**

The depot staff undertake the delivery and collection of complete bedding units for tuberculous patients and this involved the delivery of 10 units and the collection of seven units for disinfection prior to re-issue. One house was also disinfected following the removal of a patient to new housing accommodation.

## **DISINFECTION**

Once again, the Department continued to assist certain aged people in essential cleansing of their homes, including the removal of rubbish. This service is given free of charge, and during the year 39 houses were cleansed and 64 beds, together with bedding, were removed for destruction.

The steam disinfectors were kept working daily during the year, principally in the disinfection of large quantities of bedding, blankets and clothing. One complete operation of a steam disinfecter is referred to as a "stove" and the above work amounted to 1,609 complete stoves for the year. Charges were rendered to appropriate authorities, where applicable.

#### CLINIC TREATMENT FOR SCABIES AND LICE

Bathing facilities for the cleansing of scabies patients and verminous persons are provided in the Clinic at Bacchus Road. A daily service is operated until 17.15 hours during the week, except Saturday, when the Clinic closes at 12.00 hours. No treatments are provided on Sunday.

Details of treatment carried out in the year were as follows:—

				<i>Scabies</i>	<i>Body Lice</i>	<i>Pubic Lice</i>	<i>Head Lice</i>
<i>Bacchus Road Clinic (men)</i>							
Men	..	..	..	1,163	505	77	14
Boys	..	..	..	143	—	—	—
Second Treatments	..			6	—	—	—
TOTAL .. .. .				1,312	505	77	14
<i>Bacchus Road Clinic (women)</i>							
Women	..	..	..	959	14	19	29
Girls	..	..	..	1,008	1	—	56
Boys	..	..	..	676	2	—	17
Second Treatments	..			7	—	—	—
TOTAL .. .. .				2,650	17	19	102

Children referred to in the above figures were treated at the same time as their mothers.

The number of treatments at the Clinic for scabies fell sharply during the year and this is commented on elsewhere in the Report. The treatment of men for body lice, however, was considerably increased by 218 cases over the preceding year.

#### BATHING OF THE AGED AND INFIRM

The use of the Clinic for this service was discontinued at the end of January with the coming into operation of a scheme for the aged and infirm to be bathed in their own homes.



## Late Night Refreshment Houses

Under the Late Night Refreshment Houses Act 1969 a licence is required in respect of any premises other than those licensed for the sale of intoxicating liquor, etc., which are kept open for public refreshment, resort and entertainment at any time between the hours of "10 o'clock at night and 5 o'clock of the following morning". Local authorities may impose conditions on the grant or renewal of a licence for a refreshment house prohibiting the opening or keeping open of a refreshment house between "11 o'clock at night and 5 o'clock in the morning", if it is considered desirable to do so in order to avoid unreasonable disturbance to residents of the neighbourhood.

Licences are granted annually and fall due for renewal on 1st April. On receipt of an application the advice of the Chief Constable is sought and this Department's records of complaints are examined and subsequently a recommendation is submitted to the Health Committee by the Chief Public Health and Housing Inspector.

Out of a total of 116 licences issued during the year it was found necessary to impose conditions in 56 instances and of these, 20 refreshment houses were required to close at 11.00 p.m., 34 were required to close at midnight and two refreshment houses were required to close at 1.00 a.m.

The proprietors of two refreshment houses appealed to the courts against conditions imposed. In the first case the magistrates dismissed the appeal on hearing evidence by residents and police as to disturbance caused by the operation of the refreshment house. In the second case there was only one resident who could have been affected and as the refreshment house was near the market area of the City Centre the magistrate allowed the appeal and ordered the issue of an unrestricted licence indicating that the matter could be reviewed again.

In three cases the proprietors of refreshment houses contravened the Act by keeping open late at night, either without a licence or in contravention of the conditions imposed with a licence. When the cases came before the magistrates evidence of the offences was given by police witnesses, pleas of guilty were accepted and fines totalling £120 were imposed.

## SEWERAGE AND DRAINAGE

Mr. Neville Borg, City Engineer, Surveyor and Planning Officer, has kindly provided the following information upon the investigations and sewerage work undertaken during the year by the Public Works Department.

### Main Drainage

Constructional work on the City Centre Northern Outfall Sewer which was mentioned in my report for 1970 has now been completed together with work on the Bourn Brook Valley Sewer reconstruction. This latter scheme incorporated a storm retention tank and preliminary evaluation of monitoring operations on this has indicated that the use of these tanks, which contain the initial storm flush down a valley sewer which would otherwise be overflowed to the adjacent brook-course, has considerable effect on reducing the pollution load on that stream.

The Coldbath Valley Sewer reconstruction, which incorporates a similar type of tank, is virtually finished having been started in April 1971.

Work has started on the reconstruction of two foul water pumping stations at Witton and Walsall Road, the original ones being both old and undersized. It is imperative that such plant should operate continuously and at peak efficiency otherwise serious public health hazards would be immediately present.

A further length of the Hockley Main Sewer in Newtown has been reconstructed. The old sewer which is of considerable age and lies for much of its route under old property can only be rebuilt as redevelopment of the surrounding area takes place.

Research is being done by the Public Works Department on behalf of the Department of the Environment into the volume and quality of foul water discharge during dry weather from varying types of developed urban areas. This research is now being extended into the field of storm discharges.

### Surface Water Drainage and River Works

The major surface water sewerage project to commence in 1971 was the first section of the Hockley Brook Relief Culvert which entails driving a tunnel from Chester Street to Trevor Street to carry the normal flow of the Hockley Brook from the former point to an outfall on the River Rea. This scheme will alleviate flooding on the lower length of the Hockley Brook.

A start has been made on opening up the land adjacent to the main water-courses as walkways. One of the first projects of this kind to be finished is the provision of two pools on the Bourn Brook on the site of the old Harborne Reservoir, which has transformed a swamp, overgrown with scrub, into a pleasant park-like area.

The condition of the River Cole mentioned in last year's report has continued to improve and the closure of the Yardley Sewage Works has had a marked effect on the ecology of the river downstream of this point. Examination of other streams such as the Bourn Brook and the River Rea indicate that the efforts in removing major sources of river pollution are having a definite success. One important aspect of the work is advising on immediate remedial action to be taken when spillages of deleterious liquids take place.

As the obvious pollutions are removed from the streams it is becoming clear that these have masked more subtle and possibly insidious pollutions. As an example, it has been found that rain water discharged from roofs contains considerable amounts of metallic chemicals which have been deposited thereon by air pollution. This is being investigated in liaison with officers of the Public Health Department.

## **Housing**

In the report for 1970 it was stated that development work in Chelmsley Wood was complete as far as the Corporation was concerned although a considerable amount of county housing remained to be done. Since then the areas of land allocated for the latter have been transferred back to the City and are now being developed for 'houses for sale'. This will require additional drainage and road works to be constructed in 1972 to service these particular sites. No other local housing development outside the city boundary has required the services of the Public Works Department.

The major housing developments on a large scale within the City are now at Woodgate and Kings Norton Golf Course and on both of these projects the main drainage works are complete with the exception of one area at Woodgate where development has not yet started.

On the inner redevelopment areas work has been concentrated in the Newtown area, whilst there is an increasing amount of redevelopment proceeding on areas such as St. Andrews, South Aston and Summerfield. All these require the provision of new sewers and the reconstruction of existing ones.



Despite land shortage there has been an increase of nearly 30 per cent over last year's figures in the lengths of sewers laid to serve private development, this indicating that relaxation of monetary controls has caused an upward swing in the private housing sector.

### **Water Pollution Control**

The control of trade effluent discharge to foul sewers and discharges to surface water sewers and watercourses is complementary. For many years a close surveillance of both has been exercised by the Public Works Department but during 1971 the inspection of surface water discharges which occur mainly as cooling water was intensified in order to reduce pollution of watercourses which are due to be incorporated into river walkways.

During the course of routine sewer sampling in the Hockley Valley in late 1970, it became apparent that very strong acidic discharges were being made very illicitly at weekends into the city sewerage system and after a very prolonged detective exercise a chemical disposal firm was caught 'red handed' emptying a tanker full of acid into the sewers via a private drain. This firm was successfully prosecuted during 1971 but the paltry fine and costs awarded illustrate the need for proper teeth to be given to any forthcoming legislation on the dumping of chemical wastes.

### **Statistics**

**Main Drainage;** During 1971 the Corporation constructed 37.89 kilometres (23.45 miles) of foul and surface water sewers and culverts within the City. This is a decrease of approximately 10 per cent below the lengths constructed in 1970.

In addition private developers constructed 5.65 kilometres (3.51 miles) of foul and surface water sewers, this being an increase of approximately 1.26 kilometres or 29 per cent more than in the previous year.

Also approximately 1.35 kilometres (0.85 miles) of brookcourse have been regraded. In connection with the above foul water drainage, two dumbwells have been demolished, the properties draining to these having been connected to new foul water sewers.

Up to the end of 1971 the total length of public sewers inside the City amounted to 2,994 kilometres (1,861 miles) of which 1,856 kilometres (1,154 miles) are foul water sewers and 1,138 kilometres (707 miles) surface water sewers. This gives an overall increase of 37.05 kilometres (23.02 miles) after allowing for old sewers which have been abandoned or demolished.



**Pollution Control;** During 1971, 36 new Consents to drain to foul water sewers were issued but no surface water Consents or prescriptive rights were issued. After allowing for the firms which have been closed down, the number of premises now under control is 823, this being a reduction of 10 on the 1970 figure.

The number of samples taken during 1971 for foul water control was 15,022 and 694 were taken for surface water control. In addition 26 legal samples were taken leading to the successful prosecution of 10 firms for discharging beyond their Consent limits.

## **REFUSE COLLECTION AND DISPOSAL**

The following information has been kindly supplied by Mr. K. Harvey, General Manager of the Salvage Department.

### **Refuse Composition**

The Salvage Department carries out analysis of the household refuse produced in the City, on a quarterly basis, to obtain the variations which occur due to seasonal changes. Over the last 10 years the changes in refuse composition have been particularly apparent and changes that could be described as an "explosion" are being experienced at the present time.

The increase in volume is attributable to changes in living standards and habits; the increasing use of disposable products; elaborate pre-packed consumer goods; an increasing number of homes being heated by electricity, gas or oil. This particular trend has been given great impetus by the introduction of smoke control legislation, the householder can no longer burn refuse on open fires.

The tremendous redevelopment of the City Centre and the many new housing projects have all influenced the composition and output of refuse.

The density trend of household rubbish has not yet reached its lowest level, and there seems every indication that further changes will continue to take place in this field and that either additional or LARGER RECEPTACLES will be required at premises for the storage of refuse or a change in the method of storage accepted at present.

### **Provision of Dustbins**

Dustbins are supplied to all premises within the City producing domestic refuse as a charge against the General Rate Fund.

During the year 47,500 dustbins were provided by the Department. 11,000 bins manufactured from high density polythene were distributed in addition to 36,500 metal bins. These included **both** the special dustless bins, which incorporate a hinged lid, and the normal loose-lidded type.

The advantages offered by the plastic type of bin include increased holding capacity for considerably less weight—an important factor to combat the increasing volume of present day refuse, together with a reduction in noise and reduced risk of injury to personnel. There is no doubt, also, that the housewife regards the polythene bin with approval, being easier to clean and generally more hygienic than the galvanised dustbin.

## **Refuse Collection**

In the course of maintaining a regular weekly refuse collection service, the Department is required to carry out over 23 million calls per year on premises throughout the City.

A pilot experiment has recently been introduced using disposable plastic sacks for the storage of refuse to replace the traditional dustbin. This system offers many potential advantages to the householder, particularly from the aspect of hygiene, and if the experiment is successful, it is hoped to extend the system to other areas of the City.

The larger container system using containers of either  $1\frac{1}{4}$  cu. yds. or 12 cu. yds. for handling refuse in bulk is now in ever increasing use at multi-storied flats, schools, shops, hospitals and industrial premises.

Demand continues to grow for the free removal of bulky items of refuse and during 1971 some 15,800 calls were made on the free service for the removal of bulky refuse and furniture. Also 7,600 callers delivered about 1,000 tons of bulky household refuse to the Refuse Disposal Centres—the six Disposal Works of the City are all named as Disposal Centres—and over 300 abandoned vehicles were removed and disposed of.

These figures show a considerable increase on 1970 and reflect a growing public awareness of the facilities offered by the Department under the Civic Amenities Act. An extra facility for the removal of garden refuse was introduced recently by the Department. This took the form of easily identifiable red plastic sacks being offered for sale to householders at 25 p for five sacks, postage  $7\frac{1}{2}$ p. This is a neater and more convenient arrangement for the householder, and is intended to supplement the present alternative method for the disposal of garden refuse, namely, books of tickets costing  $12\frac{1}{2}$ p per book of five, one ticket to be placed on the householder's own sack or box, and removed by the collectors.

## **Refuse Disposal**

The past year has seen a carefully considered re-appraisal of the Department's policy towards Refuse Disposal. The opening of the modern works at Perry Barr has drawn attention to the increasing problems in the operation of the older works within the Department. The present climate of public opinion and anxiety regarding pollution has given impetus to major projects in an effort to eliminate air pollution and chimney emission. The new works at Perry Barr operates continuous direct incineration and many advanced features have been incorporated to deal with the changes and increased volume of refuse, vehicle design and plant automation. The use of high efficiency, electro static precipitator plant will significantly reduce the dust and grit emitted to the atmosphere. As stated previously, this sophisticated plant has merely emphasised the problems at the older works of the Department. A start has been made with the closure of Rotton Park Street works, reconstructed in 1932, as an incineration plant.

The 190 ft. high chimney has been demolished and approval given by the Salvage Committee for conversion of this works into a Refuse Transfer Station. This means broadly that no refuse will be burned at Rotton Park Street, but special compaction units will store the refuse until it is taken away in special trailers for disposal at some other depot.

The newer works at Castle Bromwich is operating to the modern standard required, but the works at Lifford, although only 10 years old and using equipment designed to minimise chimney emission, has been suggested as the next works to benefit from an investigation into the best way of improving incineration and reducing the risk of atmospheric pollution. The older works now left operating are Montague Street, reconstructed 1934, and Tyseley, extended 1938. Brookvale Road, originally built in 1924, is now virtually demolished since the opening of Perry Barr in September 1971. A scheme for the building of a new Refuse Disposal Plant to replace the existing Tyseley works has again been included in the capital expenditure programme.

It will be seen from the preceding paragraph that the Department is fully alive to the public concern regarding the pollution of the environment and a clear cut plan of modernisation and improvement in refuse disposal has been set under way.

## **General Information**

The responsibility for the collection and disposal of domestic refuse in the City of Birmingham rests with the Salvage Department, a separate Department of the Corporation under the control of the Salvage Committee.



The services operated by the Department also include collection and disposal of certain trade refuse and industrial effluents, emptying of cesspools and the removal and disposal of abandoned vehicles not on the highways or public car parks.

During the year ended 31st March, 1971, 286,632 tons of refuse were handled by the Department, which points to the magnitude and importance of the tasks, since refuse is capable of giving rise to numerous latent nuisances and hazards to public health.

A labour force of 1,441 is employed by the Department to carry out this work.

The sludge de-watering plant at Montague Street continues to deal effectively with the various trade effluents containing a high level of suspended solid. This de-watered sludge is compressed into a form which is easy to dispose of on the Department's tipping sites, and the clarified filtrate is run off to the sewer.

During the year 88 cesspools serving 112 premises received regular attention together with 93 sanitary pans in the outlying parts of the City.

## THE CITY'S WATER SUPPLY

Once again, thanks are due to Mr. R. C. Whitehead, Engineer and Manager of the Water Department, for the following information upon the engineering aspect of the supply.

### Sources

The **Elan Valley** in mid-Wales is the principal source of Birmingham's water but it is now fully developed and its reliable yield of 75,000,000 gallons daily is being supplemented by water from other sources. The impounding reservoirs on the rivers Elan and Claerwen collect the soft, peaty water from the moorland catchment and store it. The water is then drawn off as required, treated at the headworks with lime to reduce its natural aggressive tendency towards metals, passed through coarse rapid gravity type filters to remove suspended matter, chlorinated and dosed with fluoride before it enters the 70 miles long aqueduct by which it is conveyed to Birmingham. Nearly 97 per cent of the water supplied during 1971 originated from this source.

Water derived from the River Severn was also supplied to Birmingham at times of above average demand. At **Trimley Works**, about 20 miles from the City centre, river water is pumped into a reservoir from which it is taken into upward-flow reaction tanks for clarification and lime softening. Chlorination, fluoridation and pH correction follow before the water is conveyed by aqueduct to Frankley for further treatment.

There are also river abstraction works at **Whitacre**, near Coleshill, where water is taken from two Warwickshire streams the rivers Bourne and Blythe, into bankside reservoirs from which it passes—pumped in the case of the Blythe water—into a large storage reservoir. This storage constitutes an important step in the purification process as well as ensuring a reliable yield of about 6,000,000 gallons daily from the works regardless of the flow in the streams. Water from Whitacre Works is reserved almost exclusively for bulk supply to Coventry Corporation Water Undertaking and to the North East Warwickshire Water Board, to satisfy whose future requirements a scheme is being developed to expand the works to nearly double their present capacity by 1985. Various isolated premises near the pumping mains are supplied from this source as is the parish of Fillongley in Meriden Rural District. In emergencies, water can be fed into the Birmingham distribution system as it was for 10 days in March when a failure occurred at Water Orton in the 36 diameter main supplying the Coleshill area.

One local deep well is maintained by the Water Department at **Short Heath** and is capable of supplying reliably 2,000,000 gallons of wholesome water daily. Because of its extreme hardness, however, this water is pumped only in emergency. The well was brought into use for four days in 1971 and it proved to be of great value in enabling supplies to be maintained in the Middle Level zone whilst repairs were carried out to two burst trunk mains in Aston.

## **Treatment Works**

At **Frankley Works** the 40 Elan rapid gravity sand filters, each capable of dealing with 2,000,000 gallons of water daily, functioned satisfactorily throughout the year. The eight gravity filters comprising the first instalment of the Severn block were also in constant use and before the end of the year were augmented by six of the second instalment, raising the capacity of this part of the plant to 35 million gallons daily. These filters can deal with Elan, Severn or mixed waters and their output is then blended with that of the Elan block. Work proceeded on the construction of the final six Severn filters and it is expected that these will come into operation in 1972. A new covered reservoir was completed and commissioned during the year, increasing the capacity for the storage of fully-treated water at Frankley from 8 to nearly 13 million gallons. The new sulphonation plant was taken out of commission for the time being when it was found that the quantity of Severn derived water requiring to be processed was less than was anticipated. Construction work on the gravity mains booster station was well advanced and it is anticipated that this will be in operation by the summer of 1972.

At **Whitacre Works** increased pumping of water derived from the River Blythe was undertaken in order to dilute the high chloride content in the River Bourne water until October, when a pipeline, to divert the saline effluent from Daw Mill Colliery causing this pollution to below the Shustoke intake, became fully operational. After storage in Shustoke Reservoir the water is micro-strained and pre-chlorinated prior to the addition of aluminium sulphate as a coagulant and filtration through rapid gravity filters. Post-filtration chlorination and dechlorination with sulphur dioxide complete the treatment. For a large part of the year the reservoir water was of good quality and aluminium sulphate dosage was suspended. When necessary, copper sulphate was applied to the water entering Shustoke Reservoir in order to control algal growth.



## Quality Control

Work carried out during the year under the direction of the Waterworks Chemist in the Water Department laboratory included the bacteriological examination of 358 samples from raw waters, 516 samples from partially treated waters and 970 samples from the fully treated waters and from the distribution system. The results obtained on these samples, which included 171 from newly sterilized mains, showed the water to be of satisfactory purity following treatment and confirmed that this quality was maintained during distribution.

Chemical analyses were carried out on samples from the sources, reservoirs and treated waters at least monthly and biological counts were undertaken weekly on river sources and the associated reservoirs and treated waters.

367 samples were collected during the year from houses supplied by means of lead service pipes and over 95 per cent of these were found to contain less than the WHO European Standard upper limit recommended, namely 0.1 mg/l of lead although, in each case, the sample consisted of the first 2.5 litres of water drawn from the tap at the time of sampling. The remainder were from houses where there was little morning use of water so that the samples could have stood in the lead pipe for a considerably longer time than is usual. The average lead concentration in all samples was less than 0.05 mg/l and the highest figure obtained was 0.18.

## ROUTINE SAMPLING OF CORPORATION WATER

The water derived from the Welsh catchment, which is partially treated in the Elan Valley, may become contaminated during its passage to Birmingham, particularly during periods of wet weather because of the seepage of surface water into the aqueduct tunnels. At Frankley there is the added danger of contamination by water fowl, especially seagulls which visit the open storage reservoirs in great numbers each year. The water is therefore re-filtered and sterilised at Frankley Works before passing into the general mains supply.

Water derived from the River Severn is also filtered and re-chlorinated before being mixed with that of the Elan.

### ELAN AND SEVERN MIXED SUPPLY

The results of samples taken during the year of fully treated water obtained from the outflow at the Frankley Works from the covered reservoirs and from taps throughout the City showed an admirable overall picture.

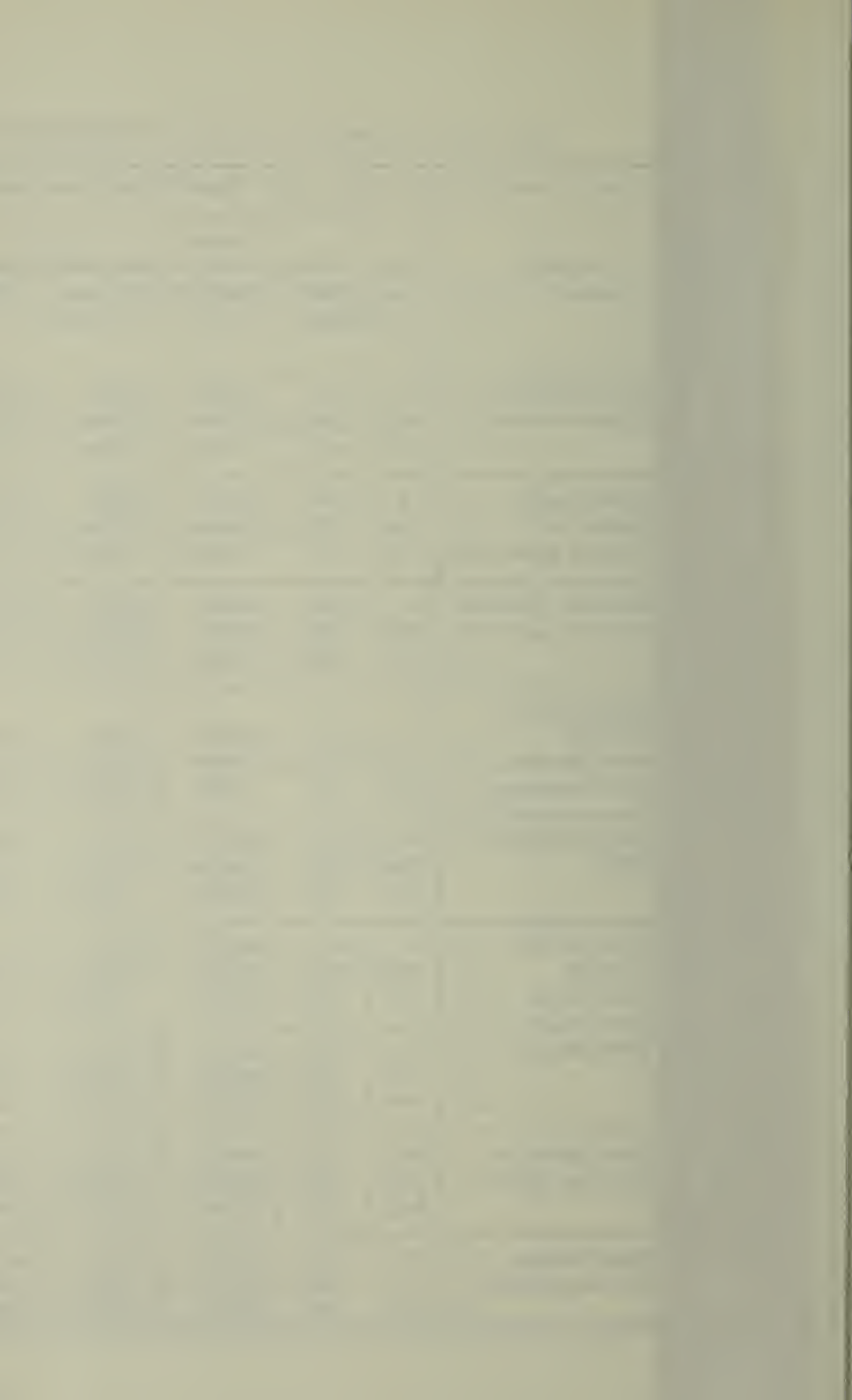
### WHITACRE SUPPLY

Sewage pollution of the Rivers Bourne and Blythe continued throughout the year. The quality of the water, however, markedly improved after retention in Shustoke Reservoir and improvement continued during the processes



AVERAGE RESULTS OF CHEMICAL EXAMINATIONS 1971

No. of samples taken	Description	ph	PARTS PER 1,000,000 (p.p.m.) OR MILLIGRAMS PER LITRE (mg/l) (Extreme values in brackets)														
			Total Solid Matter	Ammon-iacal Nitrogen (as NH <sub>3</sub> )	Albuminoid Nitrogen (as NH <sub>3</sub> )	Nitrates (N)	Oxygen consumed in 4 hours at 27°C.	Chlorides (Cl)	Hardness (as CaCO <sub>3</sub> )	Total Alkalinity (as CaCO <sub>3</sub> )	Fluoride (F)	Detergents	Hardness		Nitrates (N)	Erosion (Over-night in lead pipe)	Erosion (Over-night with leadstrip)
12	ELAN WATER: Aqueduct outlet	8.9 (8.1-9.2)	39 (36-43)	0.000 (0.000-0.004)	0.024 (0.008-0.044)	0.0 (0.0-0.1)	1.2 (1.0-1.7)	8 (7-9)	19 (16-22)	8 (6-10)	1.0 (0.9-1.1-)						
12	After storage in Bartley and Frankley Reservoirs	7.2 (6.9-7.8)	39 (37-42)	0.001 (0.000-0.012)	0.026 (0.006-0.060)	0.0 (0.0-0.1)	1.1 (0.8-1.7)	8 (7-9)	19 (18-20)	8 (7-10)	1.0 (0.9-1.0)						
7	SEVERN WATER: Aqueduct outlet	8.7 (7.2-9.1)	220 (205-235)	0.039 (0.000-0.224)	0.059 (0.024-0.140)	2.0 (1.0-3.7)	0.7 (0.6-1.4)	39 (36-46)	105 (102-110)	18 (13-26)	0.9 (0.8-0.9)					29 (8-100) (6 samples)	
12	MIXED ELAN/SEVERN After Filtration and Chlorination	7.5 (7.1-8.5)	45 (37-52)	0.002 (0.000-0.020)	0.020 (0.004-0.056)	0.0 (0.0-0.1)	1.0 (0.6-1.5)	10 (8-10)	22 (18-25)	8 (7-8)	1.0 (0.9-1.0)				0.31 (0.21-0.49) (10 samples)	115 (105-140) (11 samples)	
4	SHORT HEATH WELL	7.4 (7.3-7.5)	478 (422-510)	0.000 (0.000-0.000)	0.000 (0.000-0.000)	14.8 (13.8-17.8)	0.0 (0.0-0.1)	34 (31-35)	278 (270-290)	77 (76-78)	0.0		188 (168-216)	90 (54-110)	0		
12	WHITACRE WATER: River Blythe	7.7 (7.2-8.7)	471 (313-550)	0.390 (0.000-1.500)	0.348 (0.080-1.200)	4.4 (2.1-7.3)	3.9 (2.4-10.0)	43 (24-60)	292 (165-360)	135 (66-168)	0.3 (0.2-0.3)	0			0.05 (0.02-0.10)		
12	River Bourne:	7.6 (7.5-7.9)	920 (511-2221)	0.162 (0.000-0.840)	0.153 (0.032-0.704)	7.0 (5.3-10.1)	1.9 (0.8-5.4)	252 (47-890)	431 (280-670)		0.2 (0.1-0.3)	0					
12	After Storage in Shustoke Reservoir	8.6 (8.1-9.2)	710 (670-787)	0.058 (0.000-0.300)	0.242 (0.040-0.544)	3.4 (1.0-5.8)	1.9 (1.3-2.4)	164 (133-210)	367 (335-410)			0					
12	After filtration and chlorination	7.6 (7.1-8.5)	714 (616-773)	0.000 (0.000-0.000)	0.137 (0.032-0.216)	3.2 (0.3-8.2)	1.0 (0.4-1.6)	173 (140-215)	354 (330-370)		0.2 (0.1-0.2)	0	206 (190-222)	148 (124-180)			



of filtration and chlorination. Twice weekly samples of the purified water are taken as it leaves the works and from points along the main at Monwode Lea and Packington and on no occasion during 1971 was *E. coli* type 1 detected. The purification of such river water, which is used for bulk supply to Coventry Corporation and the North East Warwickshire Water Board, is a remarkable achievement.

#### **SHORT HEATH WELL**

Apart from one example of slight contamination, excellent reports were received upon samples of water taken during the year (even without chlorination).

#### **Chemical Examination**

The table following page 264 sets out the number of samples taken from certain points and their average chemical composition together with extreme values detected in individual cases. Monthly sampling of the Welsh water is carried out and the general picture once again showed readings which were well within normal satisfactory limits. High figures in July for turbidity of the Rivers Bourne and Blythe were undoubtedly due to the effect of heavy rain. Fluctuations in the chloride figures of the Whitacre supply caused by the discharge of brine from a colliery into the River Bourne ceased in October when the effluent was diverted past the Water Department's intake and the saline content of the final Whitacre water was thereafter reduced to a satisfactory low level.

#### **Lead in Drinking Water**

The City Analyst in his report on page 72 gives details of the results obtained throughout 1971.

#### **Fluoride**

No difficulties were experienced during 1971 in ensuring that the fluoride content remained within the limits of 0.9 to 1.1 p.p.m.F.

#### **Radioactivity**

Results upon samples taken every two weeks during the year demonstrated only very low levels of radioactivity, all being well within the limit advised by the Medical Research Council and the International Commission on Radiological Protection.

## PRIVATE WELLS

### INDUSTRIAL

There are now 60 premises within the City which are known to use water from boreholes. Since the 31st December, 1970, one borehole has been closed.

Details are as follows:—

	<i>Number of Premises</i>	<i>Number of wells</i>
Breweries using well water for all purposes .. .. .	5	13
Hotels and blocks of flats using well water for all purposes .. . . .	2	2
Hospitals using well water (stand-by only) .. .. .	1	1
Food preparation premises using well water .. .. .	3	6
Industrial premises using well water for all purposes ..	14	21
Industrial premises using well water for industrial purposes only .. . . .	35	53
	—	—
	60	96
	=	=

During the year 87 bacteriological samples and 56 chemical samples were taken from various premises. The reports obtained from these samples indicated that the water from the boreholes, although hard, was in a state of high bacteriological purity.

### DOMESTIC

There is only one dwelling within the City, known to rely on water from a shallow well. This supplies a house in a part of Bartley Green which has not yet been developed for housing. It is anticipated that this house will be demolished in 1972 and that the site, together with other land, will form a housing estate.

### DWELLINGS WITHOUT AN INTERNAL WATER SUPPLY

Since 1948, when over 6,000 houses in the City were found to be lacking an internal water supply, the Department has been striving to ensure that every occupied dwellinghouse should be provided with a piped supply of water within the dwelling. The number of houses lacking this facility has been steadily reduced year by year as a result of action taken by the Department to persuade or compel owners to provide a supply and by the City's programmes of re-development which have encompassed many of the areas of older housing containing these sub-standard dwellings.



At the 31st December, 1971, only 33 houses remained without an internal supply. As will be seen from the table below, half of these houses are unfit for human habitation, their very short life expectation precluding any formal action to compel the landlords to provide a supply. Only 14 tenants in the City still refuse to sanction works of installation; future re-development or changes of tenancy will inevitably lead to a further reduction in this number in the next few years.

The following table shows the position at the end of the year:—

Unfit houses included in declared Clearance Areas .. .. .	15
Other unfit houses whose life did not justify expense .. .. .	1
Houses whose occupants did not desire an internal supply .. .. .	14
Houses supplied by well—distant from the nearest main supply .. .. .	1
Houses suitable for installation .. .. .	2
	—
	33
	—

The reduction of 12 on the previous year's total is accounted for as follows:—

Houses provided with an internal supply .. .. .	4
Houses demolished .. .. .	2
Houses void, pending demolition .. .. .	6
	—
	12
	—

### Existing Services—Restricted Supply

In the older areas of the City there are a number of terrace and villa type houses which, though having a separate piped supply within each house, draw water from a shared supply pipe from the main. The pipe from the main, which is the responsibility of the respective owners, branches to serve between two and 12 houses. With the passage of time some restriction in the pipe takes place. Bearing in mind the increased demands for water to service water heaters, washing machines, baths, etc., such supplies often prove inadequate for today's requirements.

The Health and Water Committees gave serious consideration to requests received from owners for financial assistance in improving these services. Powers are available under the Public Health Act 1936 to require the owner of a house to take into the house by means of a pipe, a supply adequate for domestic purposes. In appropriate cases notices are served by the Health Committee after reports from officers of both the Water and Health Departments. It has now been agreed that where the Corporation undertakes work to improve a water service on private property, at either the request or default of owners, financial assistance shall be given in those cases where the payment of an improvement grant is not appropriate. The cost of the works of improvement are shared, the owner pays half and the remainder is borne equally by the Health and Water Committees. This arrangement is proving helpful in securing improvement to shared supplies, especially in general improvement areas.

## SAMPLING OF SWIMMING BATH WATER

Three hundred and thirty samples were taken during 1971 from the nineteen swimming establishments for bacteriological content and chlorine concentration; twenty-seven failed to come within the adopted high standard of not more than eleven organisms per 1 ml and the absence of coliform organisms in 100 mls. The successful control of contamination in the bath water is primarily achieved by means of chlorination—free chlorine being the principal sterilising agent. The following table sets out the months in which samples failed to achieve the highest degree of purity.

<i>Month</i>	<i>No. of samples taken</i>	<i>No. of samples with viable count more than 11 per 1 ml.</i>	<i>No. of samples with faecal coliform detected in 100 mls.</i>
January .. .. .	25	2	—
February .. .. .	26	—	—
March .. .. .	28	3	—
April .. .. .	28	2	—
May .. .. .	27	3	—
June .. .. .	27	2	—
July .. .. .	31	1	—
August .. .. .	30	4	—
September .. .. .	29	2	—
October .. .. .	26	4	—
November .. .. .	27	2	1
December .. .. .	26	2	—
<b>TOTAL ..</b>	<b>330</b>	<b>27</b>	<b>1</b>

Despite the few adverse results, the reports upon samples showed the overall picture to be excellent, with which observations Mr. J. Moth, General Manager of the Baths Department, concurs.

Sampling of three privately owned and twelve school swimming pools was carried out during the year and these complied with the required bacteriological and chemical standards.

## PERSONAL SAFETY

### Oil heaters

Returns made by the Chief Fire Officer to the Health Department indicate that the number of home fires resulting from the improper use of oil heaters or the use of defective appliances increased from 91 in 1970 to 94 in 1971.

The principal reasons for these domestic fires are still:—

- (a) Oil heaters being used in the close vicinity of bedding, furniture and other combustible material.
- (b) Oil heaters being re-filled with paraffin when still alight.
- (c) Oil heaters being carried when alight.
- (d) Oil heaters being placed in a position where draughts from windows and doors affected their performance, or where they were knocked over by children or domestic pets.

Although new appliances are carefully designed and manufactured to modern British Standard Specifications which have more stringent requirements than current legal standards, there are still a large number of old appliances in use which are potentially dangerous and which could be the cause of serious injury or death.

The attraction of oil heaters is the relative ease, convenience and flexibility with which they can be used and which can be matched only by modern gas or electric fires.

However, with rapid progress in the introduction of smoke control areas throughout the City, and the high proportion of coal fires converted to gas or electric (almost 90 per cent) it is unlikely that oil heaters will in future remain as popular as in the recent past. Nevertheless it is still very necessary for all members of the Health Department and Social Services Department staff, who visit people at home, to be alerted to the dangers of oil heaters and to be competent to advise householders on the correct use of the appliances.

The following action was taken during 1971:—

<i>Number of premises visited</i>	<i>Number of appliances examined</i>	<i>Number of appliances found to be defective</i>
72	108	17

In all cases the vendor was instructed on the requirements of the Oil Heater Regulations and the defective appliances were destroyed.



## INDUSTRIAL PREMISES

### Sanitary Accommodation in Factories

Sanitary matters arising in factories are dealt with under the provisions of Part I of the Factories Act 1961. The Local Authority enforces general requirements relating to cleanliness, overcrowding, temperature, ventilation, drainage of floors and sanitary conveniences in factories in which mechanical power is not used. Where there is mechanical power, only sanitary conveniences are dealt with.

The number of visits paid to industrial premises, defined as "factories" under the Act, totalled 3,677 for the year, representing an increase of 756 inspections when compared with the figure of 2,921 for 1970.

The total number of premises registered in 1971 was 4,928 compared with the figure of 4,856 for 1970.

### Inspections for Purposes of Provisions as to Health

<i>Premises</i>  (1)	<i>Number on Register</i>  (2)	<i>Number of</i>		
		<i>Inspections</i>  (3)	<i>Written notices</i>  (4)	<i>Occupiers prosecuted</i>  (5)
(i) Factories in which Sections 1, 2, 3, 4, and 6 are to be enforced by Local Authorities .. .. .	39	7	1	—
(ii) Factories not included in (i) in which Section 7 is enforced by the Local Authority ..	4,766	3,522	122	—
(iii) Other premises in which Section 7 is enforced by the Local Authority (excluding outworkers' premises) ..	123	148	4	—
TOTALS ..	4,928	3,677	127	—

As in the past, factory managements continued to co-operate with the Department in complying with the requirements of the informal notices referred to above and it was not necessary to institute legal proceedings in any case.

Inspectors, when making the above visits, continued the practice of attending to factory canteens, outworkers, etc., whilst on the premises, and in this way the most economical use of available manpower is exercised.

### Cases in which DEFECTS were found

(If defects are discovered at the premises on two, three or more separate occasions they are reckoned as two, three or more "cases").

Particulars	Number of cases in which defects were found				Number of cases in which prosecutions were instituted
	Found	Remedied	Referred		
(1)	(2)	(3)	To H.M. Inspector (4)	By H.M. Inspector (5)	(6)
Want of cleanliness (S1) ..	1	3	—	1	—
Overcrowding (S2) ..	—	—	—	—	—
Unreasonable temperature (S3) .. ..	—	—	—	—	—
Inadequate ventilation (S4) .. ..	—	—	—	—	—
Ineffective drainage of floors (S6) .. ..	—	—	—	—	—
Sanitary Conveniences (S7)					
(a) Insufficient .. ..	4	2	—	2	—
(b) Unsuitable or defective	338	295	—	49	—
(c) Not separate for sexes	—	1	—	—	—
Other offences against the Act (not including offences relating to outwork) ..	19	10	—	—	—
TOTAL ..	362	311	—	52	—

## Outworkers

Certain classes of light work in connection with various trades carried on in the City are given out to persons who do it in their homes or small workshops. Section 133 of the Factories Act 1961 requires the employers of these people to supply the Local Authority with lists of their names and addresses during the months of February and August in each year.

The August return for 1971 gave the following particulars:—

### LIST OF OUTWORKERS 1971

<i>Nature of Work</i>	<i>Number of Outworkers in August</i>
Wearing apparel .. .. .	48
Electro-plate .. .. .	218
Brass and brass articles .. .. .	4
Paper box making .. .. .	31
Carding, etc., of buttons, etc. .. .. .	292
	<hr/>
	593
	<hr/>

The above figures show a considerable increase of 286 outworkers employed when compared with the total number of 307 for the previous year and this increase has been brought about by the practice of hospitals employing more patients as outworkers in connection with therapy and after-care.

All known outworkers' premises were visited by public health inspectors throughout the year and these inspections revealed no work being done in premises considered to be injurious or dangerous to health.

## Town and Country Planning Acts 1962 to 1968

In order to see that maximum use is made of the above Acts in ensuring that good planning incorporates the legislated requirements of public health and recommendations made in codes of practice, a close liaison is maintained between this Department and that of the City Engineer, Surveyor and Planning Officer.

Plans and applications which in any way have a bearing on the work of the Department are forwarded to the Chief Public Health and Housing Inspector for examination and comment. Such plans include food premises, factories, shops, houses and housing projects. After preliminary examination they are passed to specialist officers within the Department where appropriate. During the year 2,131 applications were dealt with, being an increase of 53 when compared with 2,078 for 1970. These applications, together with appropriate plans, were scrutinised by the undermentioned officers as follows:—

					<i>Number of applications referred</i>			
Public health and housing inspectors	..	..	..	..	2,077			
Noise abatement and atmospheric pollution inspectors	..	..			499			
Shops inspectors	..	..	..	..	85			
Food inspectors	..	..	..	..	40			
Medical officers	..	..	..	..	1			
Veterinary officers	..	..	..	..	9			

Opinions of the various officers were collated and suitable replies prepared by the Chief Public Health and Housing Inspector. It was necessary to make comment in 1,060 cases, or approximately 49 per cent.



## NOISE AND VIBRATION CONTROL

Public awareness of all forms of environmental pollution, including noise, is increasing year by year. Stimulated to some extent by European Conservation Year (1970), amenity bodies, residents associations; academics and politicians are all demanding improved methods to monitor pollution, and more attention to pollution control. The problem of noise is no exception to this generalisation.

In my Annual Report for 1970, I referred to the Noise Advisory Council, and to a Working Party of the Noise Advisory Council appointed under the chairmanship of Sir Hilary Scott to study existing noise control legislation and to report on how the legislation could be strengthened. During April of this year we had the honour to receive the working party in Birmingham when they visited the Department to discuss our work with the Chief Air Pollution and Noise Abatement Inspector and to visit a number of local industrialists at whose premises noise problems have arisen.

As a result of this visit, much of the written and verbal material presented to the Working Party was later incorporated in one form or another in their report "Neighbourhood Noise".

"Neighbourhood Noise" is a well written document which is easily read by the layman. Its recommendations include suggestions for:

- (a) A new and radical approach to noise control legislation.
- (b) Imposition of maximum noise levels at the boundary of an industrial or similar site.
- (c) Regular consultation between Planning and Public Health Departments of local authorities.

In relation to new legislation, the Report recommends that there should be imposed on the occupier of any premises a legal obligation to use "the best practicable means" to minimise the emission of noise, and to couple this general requirement with more specific legislation concerning nuisance due to noise and, additionally, the Report recommends that provision should be made in legislation for a local authority to create "Noise Abatement Zones" and to specify target levels of noise with which industry etc. must comply within a specified period of time and thereafter not exceed, thus reducing or holding steady the ambient noise levels in the area.

The Secretary of State for the Environment has indicated that the Government accepts the Working Party recommendations and that new legislation will probably be introduced during the life of the present Parliament.

Locally, the number of noise complaints received by the Department during the year again increased, and of the 203 complaints made by members of the public against industrial and similar noise, 199 were found to be justified.

The tabulation compares 1971 figures with 1969 and 1970:—

#### ANALYSIS OF NOISE COMPLAINTS 1969-1971

Source of Noise	Number of complaints			Source of Noise	Number of complaints		
	1969	1970	1971		1969	1970	1971
Air compressors	10	4	16	Metal fabrication	2	4	2
Air blowers	2	—	3	Oil and gas burners			
Car breakers	3	1	5	(Industrial furnaces)	6	1	—
Car repairers	9	4	18	Pile driving	—	2	3
Car wash plant	—	1	—	Pumps	5	4	3
Concrete mixers	1	—	1	Refrigerators	3	2	8
Cooling towers	5	5	4	Road tankers			
Coin operated laundries	3	5	4	(discharging)	1	—	—
Dust and fume arrestors	7	5	5	Rolling mills	1	—	—
Drop hammers	7	1	1	Sewing machines			
Earth moving machines	11	5	4	(Industrial)	2	—	1
Engine testing	—	—	1	Shoe manufacturing			
Fans-general	24	8	22	and repairing	1	1	—
Power presses	7	1	5	Transformer (M.E.B.)	—	1	—
Pneumatic drills	24	45	46	Vehicle movements	3	6	10
Machine noise				Woodwork machinery	2	2	2
(factories)	7	12	10	Miscellaneous	28	8	15
Motor cycle speedway racing	—	—	5				
Material handling	10	13	5				
				Grand Total	184	141	199

One could conclude from figures showing an increase in noise complaints that industry was not being co-operative, but this would be a wrong assumption since the cordial relationship which exists between the Air Pollution and Noise Control Inspectorate, Architects, Consultants and Engineers is in fact paying handsome dividends. It is now regular practice for consultants and engineers of all types to seek advice from technical officers of the Department before proceeding with the design of new buildings or the installation of new plant, and this undoubtedly reduces the possibility of noise problems subsequently occurring.

However, there are even yet some engineers in industry, possibly "muffled" by accountancy oriented management, who either will not (or cannot) consider potential noise as one of the major factors to be taken into consideration when planning new works, new extensions, or the location of new machinery. Such short-term and narrow minded thought will inevitably bring problems and will eventually substantially increase capital expenditure as modifications to buildings, plant or factory layout have to be carried out.

In a few isolated cases there is almost open opposition to noise reduction measures which are recommended—normally because of the capital cost of equipment and improved structures. But if we are to improve the environment of the many mixed industrial/residential areas of the City where noise, vibration and other forms of pollution occur, industry and commerce must be prepared to increase its investment in pollution control equipment, etc.; and the community must be prepared to pay the cost.

There is little doubt that Industry would say that capital investment on pollution control equipment is an overhead which must be offset by an increase in the cost of goods or services and is thereby passed on to the consumer—the public. But one is equally convinced that with increasing intolerance of all forms of pollution, the public is prepared to pay for the clean, quiet and healthy environment it demands.

## ATMOSPHERIC POLLUTION CONTROL

The tabulations and chart at the end of this part of the report show that during 1971 there was once again an improvement in the quality of air in the City, and particularly significant is the reduction in deposited solid matter from an average of 124·3 tons/square mile in 1970 to 94·5 tons/square mile in 1971, a drop of 24 per cent in one year.

The 1971 figure is almost exactly one half of the 1958 figure of 187·5 tons/square mile when the industrial provisions of the Clean Air Act 1956 first became operative.

Since 1958, combustion technology and the technology of grit, dust and fume control has progressed rapidly, concurrent with an equally rapid reduction in the consumption in the City of industrial and domestic coal, coke and other solid fuel. There is no doubt that housewives and industrialists alike are realising the advantages in terms of cleanliness and convenience of piped and wired fuels and are eager to convert their fireplaces and furnaces when the opportunity presents itself.

An example of this is found in the case of one very large non-ferrous metals works in the northern part of the City which in 1965 was burning coal at the rate of 135,000 tons/year; but which by the introduction of fuel oil and latterly natural gas, has reduced the tonnage of coal to 90,000 tons in 1970/71 and 5,000 tons in 1971/72. Whereas a few months ago we received regular and sometimes widespread community complaints of grit and dust fall-out from this works, there has not been one complaint since conversion was completed.

There is no doubt that the relative importance of the traditional sources of air pollution is altering vis-a-vis new sources and that as the importance of coal-smoke and sulphur dioxide as atmospheric impurities reduces, so the importance of toxic heavy metals in the atmosphere and the mass emission of road vehicle exhaust gases and aerosols must inevitably increase.

During 1971 the Health Committee gave urgent consideration to the subject of air pollution monitoring and accepted a policy report that modern instruments should be purchased and installed during 1972. Further reference to this will be included in the next Annual Report.



## Domestic Smoke Control

During 1971 three smoke control orders became operative:—

<i>Order No.</i>	<i>Area</i>	<i>Acreage</i>	<i>No. of Dwellings</i>
148	Dart Street/Kingston Road.. .. .	18	104
130	Bartley Green/Selly Oak .. .. .	4,641	21,738
150	Harborne/Edgbaston/Quinton .. .. .	5,400	24,459
TOTALS ..		10,059	46,301

Additionally two more orders were made and submitted to the Department of the Environment for confirmation:—

<i>Order No.</i>	<i>Area</i>	<i>Acreage</i>	<i>No. of Dwellings</i>
158	Broadway .. .. .	265	3,410
160	Stechford/Yardley/Sheldon .. .. .	3,830	24,750
TOTALS ..		4,095	28,160

Thus at the end of the year, the smoke control programme was progressing very well to the intended completion date in 1978:—

### SMOKE CONTROL AREA PROGRAMME

<i>Date</i>	<i>Dwellings</i>		<i>Acreage</i>	
	<i>In Areas</i>	<i>% of City</i>	<i>In Areas</i>	<i>% of City</i>
As at				
31st December, 1971 ..	170,835	51%	29,447	57%
As proposed				
31st December, 1972 ..	192,910	57%	32,505	63%
As proposed at				
31st December, 1973 ..	217,660	65%	36,105	70%
As proposed at				
31st December, 1975 ..	265,660	79%	42,604	82.6%

Number of dwellings in the City . . . . . 335,254

Acreage of the City . . . . . 51,598 acres

In the 1970 report there was reference to the shortage of domestic solid smokeless fuel which was anticipated for the winter of 1970/71 but which, due to the mild weather, did not arise. During 1971 additional smokeless fuels production plant was brought into operation by the private and nationalised fuel industries and it can now safely be stated that there is not likely to be a shortage in the foreseeable future (delivery problems and industrial disputes permitting).

As stated previously, however, the householder continues to convert fireplaces to convenience fuels and the tabulation shows how the trend from solid fuel continued during 1971.

#### ANALYSIS OF SMOKE CONTROL ADAPTATIONS IN DOMESTIC PREMISES 1969 TO 1971

	1969			1970			1971		
	No. of Appliances	Total	%	No. of Appliances	Total	%	No. of Appliances	Total	%
(a) <i>Solid fuel appliances</i>									
Open fires	655	1,286	20.6	301	626	12.5	254	375	10.3
Room heaters (inc. partial central heating)	607			318			114		
Independent boilers (inc. full central heating)	24			7			7		
(b) <i>Gas appliances</i>									
Gas fires	4,523	4,693	75.0	3,923	4,082	81.3	2,796	2,938	80.5
Central heating (by independent boiler or back boiler)	170			159			142		
(c) <i>Electric appliances</i>									
Fires, radiators and convectors	143	266	4.3	159	302	6.0	195	332	9.1
Storage heaters	123			143			137		
(d) <i>Oil fired appliances</i>									
Boilers (Central heating)	2	2	0.1	10	10	0.2	5	5	0.1
Others	NIL			NIL			NIL		
TOTAL	6,247	6,247	100.0	5,020	5,020	100.0	3,650	3,650	100.0

The cost of purchasing and installing domestic heating appliances continued to spiral with the general cost of living and for some 2 years or so it had been obvious that cost limits fixed by the Minister of Housing and Local Government in June 1966 were inapplicable to current costs, were creating difficulties when applications for grant were received and were seriously diminishing an individual's "freedom of choice" of both fuel and appliance.

Consequently, although it meant that additional costs would be borne by householders and by local authorities, the announcement by the Department of the Environment in May 1971 that cost limits could be increased by an average of 17 per cent met with almost universal acceptance. To those people on fixed weekly incomes, however, the cost of converting their traditional open coal fire—however much they might welcome the change—is often prohibitive, and opportunity is taken here to repeat the Health Committee policy on this matter.

1. Old aged pensioners in receipt of a supplementary Social Security pension will be allowed the *full cost* of converting their open coal fires to a reasonably priced fire of their choice. The pensioner will have freedom of choice of fuel, and may select an adequate solid smokeless fuel burning open fire, a gas fire or an electric fire; where necessary an electric immersion heater will also be fitted.

The Health Committee cannot pay the full cost of expensive or sophisticated appliances, but the applicant can use his grant towards the cost and installation of a better or more attractively designed fire if he so wishes and pay the balance himself.

2. Applications from people not included in 1 above but who are in receipt of Social Security benefits or who are otherwise in urgent need of financial assistance, are considered on their merits.

### **Atmospheric Pollution from Industrial and Commercial Premises**

Gradually, air pollution control legislation is becoming tighter in relation to industrial emissions. During the year, two new sets of regulations were promulgated:—

- (a) The Clean Air (Measurement of Grit and Dust from Furnaces) Regulations.
- (b) The Clean Air (Emission of Grit and Dust from Furnaces) Regulations.



The first regulations allow the local authority to require industrialists to measure the amount of grit and dust emitted from chimneys serving furnaces of all types, and the second prescribe the maximum levels of emission which are acceptable from certain classes of furnace; further regulations prescribing maximum emissions from other furnaces are currently under consideration.

The "emission" regulations now apply to new solid fuel and liquid fuel fired furnaces and in 1978 will apply to existing units. As indicated previously, the number of solid fuel-fired furnaces in the City is decreasing but there are still a few units where the "measurement" regulations will be applied during the next few years. It is doubtful if much can be gained at the present time by measuring grit and dust from oil-fired units until the quality of combustion in most furnaces is improved and the frequent emissions of light smoke from oil-fired plant is eliminated by good planned maintenance. However, as smoke control orders increase the acreage of the City which is compulsorily "smokeless" thereby requiring careful maintenance and control of oil burners, it will be possible in future years to apply the "measurement" regulations to these units and thereby ascertain the emission of solids. During the interim period to 1978, industry has a few years to put its house in order and to ensure that the emission of solids is minimised in all cases.

For many years, an embarrassment to the Health Committee and its technical officers has been the frequent and massive emissions of paper char, grit and dust from the chimneys of the City Salvage Department refuse destructors, resulting in widespread complaints in those parts of the City unlucky enough to receive the fall-out.

Immediately after the 1939-45 war it was apparent that the old destructors were of obsolete design and despite modification and limited modernisation had a very limited life. A new destructor was planned for the southern part of the City and eventually constructed in Lifford during 1961. This unit was of an accepted design and equipped with a type of grit and dust arrestor considered adequate for that date, but unfortunately with increasing paper content of domestic and industrial refuse and with less public tolerance of pollution, the inefficient grit and dust arrestor units of the Lifford destructor plant are now considered to be totally unsatisfactory for the 1970's. At the time of writing this report it is known that urgent steps are being taken to improve the situation by the installation of modern efficient arrestor units at a cost of approximately £250,000.

A second new destructor was built at Castle Bromwich during 1966; this destructor was the first municipal incinerator in the United Kingdom to be



equipped with highly efficient electrostatic grit and dust arrestors for flue-gas cleaning and once again Birmingham lived up to its motto "Forward" in relation to pollution control. Electrostatic precipitators are now standard equipment for refuse destructors in the United Kingdom.

With the need to demolish the Brookvale Road destructor because of the planned route of the M6 Midlands Link Motorway System, the Salvage Committee took the opportunity to construct a third post-war unit at Perry Barr. In this case, the new destructor is of ultra-modern design and appearance with two continuous grate incinerators capable of consuming 12 tons of refuse/hour each grate, and once again suspended solids are removed from the flue gases by electrostatic precipitators.

This now leaves only James Road and Montague Street destructors to be replaced. (The Rotton Park Street premises have been closed as a destructor and are being converted to use as a transfer loading station.) These two remaining pre-war units are also the cause of widespread community complaints of stack solids emissions which have received considerable press and television publicity over the years, and with the pressure of public opinion it cannot now be long before they are also replaced. Indeed, it is also known at the time of writing this report that a feasibility study is being made of a site in Tyseley for a new disposal works which will cost over £3 million.

The purpose of including this potted recent history of pollution from the Salvage Committee's works is to show that there is no virtue in hiding the local authority's own problems even if they could be hidden. Rather let it be known by citizens and industrialists alike that the Council is aware of its obligations to minimise pollution from its own premises and is prepared to make massive capital sums available to eliminate such pollution whenever and wherever it arises. For far too long, some industrialists in the City have cited the Salvage Department (without avail) when they have themselves been approached to improve combustion conditions or to install arrestor plant; but the day is now near when they will no longer be able to do so, and the air of the City will be even cleaner than it is now.

Mention has been made of widespread community reaction when emissions appear to be excessive and cause pollution over an extensive area. Let no one ever underestimate the power of public opinion in pollution control matters, particularly when the opinion is channelled through well organised action groups or residents' associations. Such is the case of Kings Norton where during 1971 the wrath of public opinion in the area was directed against six industrial establishments allegedly causing excessive air pollution and/or noise.

The result was that senior technical officers of the Department spent a very large proportion of their time investigating the complaints and allegations and, what is important, found that in a majority of the instances quoted they were more than justified. Obviously the pollution problems of Kings Norton were not new and had been known for some time; they were indeed being tackled as fast as Departmental staff-time permitted and as the technical and financial resources of the individual companies allowed, but increased public pressure indicated that action was just not fast enough.

Even so, once the problems have been identified, the expenditure of hundreds of thousands of pounds in minimising pollution in the area must inevitably take some time. Publicity must however be given to let the residents of Kings Norton and area know that action *is* being taken and that vast sums of money are being invested both by the Local Authority and industry to reduce pollution and to improve the environment of this part of the City.

### Installation of New Furnaces

Under the provisions of Section 3 of the Clean Air Act 1956, any intention to install a new furnace must first be notified to the Local Authority, and the applicant may, if he so wishes, apply for approval that the plant is capable of substantially smokeless operation when burning a fuel of a type for which it was designed.

The following table shows the number of furnaces installed during 1971 compared with 1968 to 1970.

	<i>1968</i>	<i>1969</i>	<i>1970</i>	<i>1971</i>
No. of Notifications	162	243	252 + 107 notifications of plant conversion to gas firing	292 + 87 notifications of plant conversion to gas firing
No. of Furnaces	figures not available	425	567 + 256 furnaces converted to gas firing	539 + 80 furnaces converted to gas firing

Excluding the conversions to gas firing, the proportion of new gas fired furnaces being installed has increased from approximately 10 per cent prior to 1968, to 40 per cent in 1969, 59 per cent in 1970 and 70 per cent in 1971.

## Heights of Chimneys

The Air Pollution Control Section of the Department continues to maintain close liaison with the Building Surveyor's and Town Planning Sections of the Public Works Department. The following details summarise the number of applications for chimney approval which were considered:—

(a) Clean Air Act 1968—Section 6	..	..	..	..	59
(b) Building Regulations 1965	..	..	..	..	346

In the case of those chimneys subject to Building Regulation control, co-operation with the Building Surveyor's section ensured that the height and location of chimney terminals were such that products of combustion were adequately dispersed and could not enter buildings in concentrations likely to cause "nuisance".

## STATUTORY ACTION RELATING TO AIR POLLUTION CONTROL

### 1. Domestic Contraventions

There were fewer reported cases of illegal smoke emission from domestic chimneys in smoke control areas and no cases of illegal fuel delivery. Warnings were sent in the twenty-five reported cases of smoke emission.

### 2. Industrial Contraventions

#### (a) *Clean Air Act 1956*

- (i) Section 1—Emission of dark smoke from chimneys  
1 case                      £25 penalty

#### (b) *Clean Air Act 1968*

- (i) Section 1—Dark smoke emission from industrial or trade premises, i.e.  
from bonfires  
30 cases                      £535 penalties

Particular mention must be made of the continuing problem of industrial bonfires and the distinct problems they create. The thirty prosecutions included proceedings against demolition contractors for burning linoleum, tyres, roofing felt and similar high volatile wastes, car breakers for burning tyres, upholstery, car trim and even whole bodies, and other scrap merchants for burning insulated cable to recover the saleable copper core; in no cases were the defendants taking steps to minimise smoke emission.

It is interesting to note that the average fine was only £17.50 and this could perhaps be compared with the saleable value of scrap cable:—

Covered cable selling price approximately £5 per cwt.

Stripped or burned cable selling price approximately £20 per cwt.

In the other cases, the reduced labour costs, and the higher price obtainable for “clean” steel completely offset the fines, which were hardly a deterrent at current scrap values to those scrap dealers who wished to make a quick profit at the expense of a polluted environment. Could this be the magistrates’ interpretation of “the polluter must pay for the pollution he causes”?

### **The Measurement of Air Pollution**

Reference has been made in previous pages to the spectacular reduction in deposited solids during 1971; and to the less but equally pleasing reduction in sulphur dioxide absorption onto the lead dioxide instruments.

The following tabulations and chart show the results of the deposit gauges and lead dioxide candles compared with previous years.



TABLE I MONTHLY RECORD OF SOLID MATTER DEPOSITED — EXPRESSED IN TONS PER SQUARE MILE (1971)

Station	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Great Charles Street ..	22.3	20.9	33.6	15.5	10.4	12.5	19.3	10.0	10.2	12.6	17.7	15.1	200.1
West Heath .. ..	2.8	2.9	4.2	2.8	3.5	6.1	2.7	0.5	2.3	2.3	2.2	1.8	34.1
Edgbaston .. .	4.2	3.1	4.3	4.2	5.6	10.0	19.9	1.8	5.5	6.2	3.8	5.2	74.3
Carnegie Institute, Hockley	11.2	8.5	11.2	8.9	8.5	8.5	12.7	5.1	8.6	7.7	8.2	8.4	107.5
Spring Lane, Erdington ..	5.0	3.3	7.7	3.1	4.0	6.0	10.5	2.7	7.2	4.2	5.5	5.2	64.4
Treatford Lane .. ..	6.1	3.8	4.1	4.2	4.8	5.2	6.2	3.9	5.0	3.3	5.2	4.4	56.2
Tower Hill .. ..	2.8	1.4	3.7	7.0*	17.1	4.0	6.4	2.2	5.0	2.0	3.4	2.2	57.2
Bradford Street .. ..	9.1	16.5	20.4	9.4	8.9	16.5	14.6	12.5	11.0	13.5	16.7	13.0	162.1

\* Results suspect, average summer figure inserted.

TABLE II MONTHLY RECORD OF SULPHUR DETERMINATION BY THE LEAD DIOXIDE METHOD — EXPRESSED AS MILLIGRAMS OF SO<sub>2</sub> PER 100 SQUARE CENTIMETRES PER DAY (1971)

Station	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total	Average
Great Charles Street ..	4.3	3.4	3.6	2.9	1.8	2.1	1.0	1.0	1.6	2.3	3.5	3.2	30.7	2.6
West Heath .. ..	1.2	0.7	1.2	0.9	0.5	0.6	0.5	0.6	0.5	0.5	1.1	1.1	9.4	0.8
Edgbaston .. ..	2.2	1.5	2.1	1.8	1.2	1.0	0.9	0.7	1.1	1.8*	1.8†	1.9	18.0	1.5
Carnegie Institute, Hockley ..	2.6	2.6	2.1	1.8	1.2	1.1	1.0	1.1	1.3	2.2*	2.4	1.3	20.7	1.7
Spring Lane, Erdington ..	2.2	2.0	1.6	0.9	0.8	0.8	0.7	1.1	0.9	1.6	2.2	2.0	16.8	1.4
Treatford Lane .. ..	1.1	1.2	1.1	0.8	0.6	0.5	0.4	0.5	0.5	0.6	1.1	1.1	9.5	0.8
Tower Hill .. ..	1.9	1.1	1.2	0.9	0.5	0.5	0.7	1.3	0.7	1.0	1.1	1.2	12.1	1.0
Bradford Street .. ..	1.4	1.5	2.1	1.6	0.9	1.1	0.7	0.8	0.9	0.9	2.1	1.7	15.7	1.3

\* Result not available due to laboratory accident; average winter figure inserted

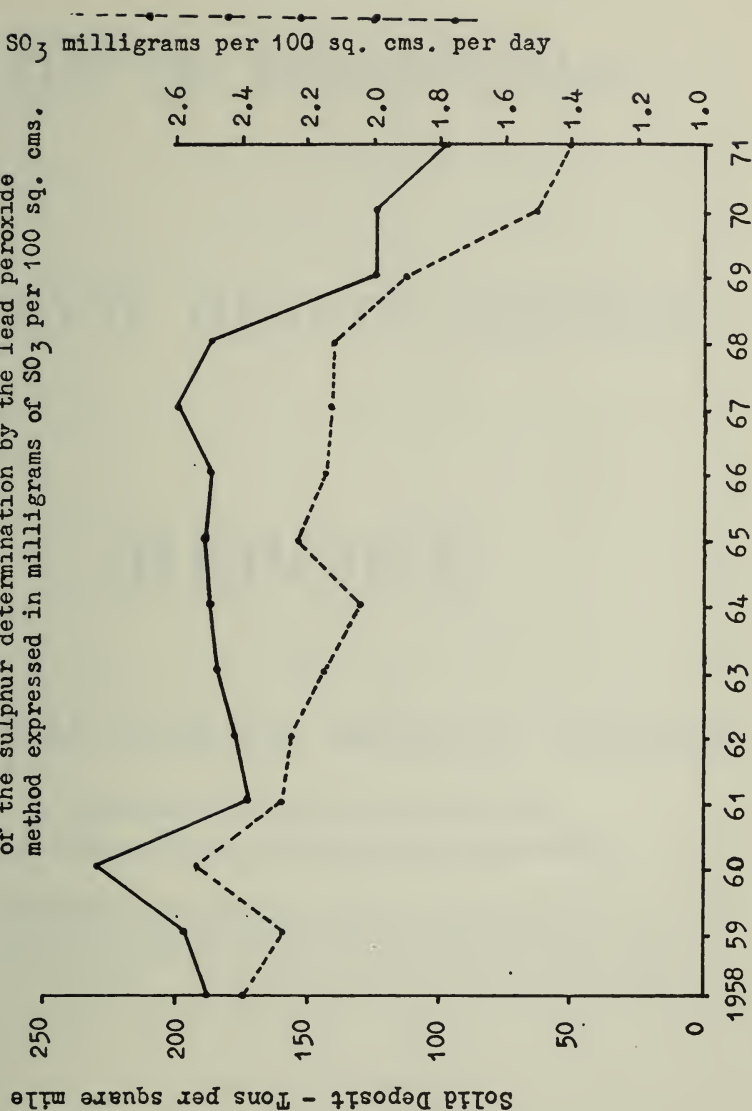
† Sample stolen; average winter figure inserted

TABLE III

Station and type of area.	Yearly total of solid deposit in tons per square mile <i>Inc. or Decr.</i> 1970-71				Sulphur dioxide as mgms of SO <sub>2</sub> per 100 sq. cms of lead dioxide per day, <i>Inc. or Decr.</i> 1970-71			
	1969	1970	1971		1969	1970	1971	
GREAT CHARLES STREET Commercial ... ..	227.5	290.2	200.1	—90.1	3.1	2.6	2.6	—
WEST HEATH Residential ... ..	43.6	43.3	34.1	—9.2	1.0	0.8	0.8	—
EDGBASTON RESERVOIR Residential ... ..	86.1	83.7	74.3	—9.4	1.7	1.5	1.5	—
CARNEGIE INSTITUTE, HOCKLEY Industrial and residential ...	144.7	119.0	107.5	—11.5	2.1	1.6	1.7	+0.1
PUBLIC WORKS DEPOT, SPRING LANE Mainly Residential ...	121.7	119.9	64.4	—55.5	3.6	2.0	1.4	—0.6
TREATFORD LANE, ALUM ROCK Residential ... ..	79.0	72.0	56.2	—15.8	1.0	0.9	0.8	—0.1
TOWER HILL Residential ... ..	59.9	67.1	57.2	—9.9	1.1	1.0	1.0	—
BRADFORD STREET Industrial ... ..	235.5	189.2	162.1	—27.1	1.6	1.4	1.3	—0.1

# ATMOSPHERIC POLLUTION

Graph showing the average weight of solid matter collected by deposit gauges expressed in tons per square mile per annum and the mean daily average of the sulphur determination by the lead peroxide method expressed in milligrams of  $\text{SO}_3$  per 100 sq. cms.







CITY OF BIRMINGHAM

SCHOOL HEALTH SERVICE

# REPORT

*of the*

PRINCIPAL SCHOOL MEDICAL OFFICER

E. LESLIE MILLAR, C.B.E., M.D., M.Sc., D.P.H.

Medical Officer of Health and Principal School Medical Officer

NATALIE M. JOHNSTON, L.R.C.P., L.R.C.S., D.P.H.

Senior Administrative Medical Officer for Personal and Child Health Services

FOR THE YEAR ENDED 31st DECEMBER, 1971

**MEMBERS OF THE SPECIAL SERVICES  
SUB-COMMITTEE  
OF THE EDUCATION COMMITTEE  
(Responsible for School Health Service Matters)**

---

*Chairman* ALDERMAN MRS. W. O. EASEY, J.P.

ALDERMAN S. E. DAWES, J.P. (ex officio as Chairman of the Education Committee)

ALDERMAN K. G. HARDEMAN

COUNCILLOR MISS M. E. BARTLETT

COUNCILLOR F. J. GRATTIDGE

COUNCILLOR J. G. HANNAH

COUNCILLOR A. HOWELL

COUNCILLOR MRS. M. J. LOCKE

COUNCILLOR MRS. J. M. LYNES

COUNCILLOR A. V. PAGE

COUNCILLOR E. WILLIAMS

P. J. DAVIES

MRS. I. EDWARDS

F. HASLAM

MRS. E. R. POWELL

W. J. SLATER

MRS. M. SYMONS

*Chief Education Officer:—*

K. BROOKSBANK, D.S.C., M.A., M.ED.

# GENERAL

## To the Chairman and Members of the Education Committee

I have the honour to present for your consideration the report on the work of the School Health Service 1971.

Of necessity much of the work is of a routine nature and is described in these reports year after year. They may not fully reveal to the reader the truly dynamic nature of the Birmingham School Health Service which is alert to learn about new advances in technology which can be applied for the benefit of schoolchildren. The School Health Service is uniquely placed in an advantageous position for undertaking research into child health problems and it is appropriate here to acknowledge the substantial co-operation and help in this field from teachers and parents alike, all of whom share with the Service an interest in enhancing the health of children.

During 1971 Dr. Trevor Cooke, Consultant Physician, United Birmingham Hospitals, began an investigation into adolescent rickets and the Department of Health and Social Security undertook a nutritional survey. The results of these investigations have not yet been published but accounts of the following research have appeared in medical journals.

An article was published in the British Medical Journal in March 1972 setting out the results of a survey of intestinal pathogens from immigrant children carried out by Dr. R. G. Thompson and Dr. J. G. P. Hutchison of the Regional Public Health Laboratory, East Birmingham Hospital and Dr. Johnston. Some 4,000 children were screened between June 1968 and October 1970. A faecal sample was examined from each child to detect the presence of parasitic ova, cysts and pathogenic bacteria. 1,443 children showed a positive result of one kind or another which included 328 with mixed infestations. All those infested were referred for treatment although many of the children were not yet registered with a doctor. There were substantial language barriers and it was not possible to follow up to see whether treatment had been effective, owing to staff shortages. There can be little doubt, however, about the value of the work undertaken and many children benefited from treatment which would not have been available to them in their country of origin.

The policy of arranging for a full medical examination of all newly arrived immigrant children before admission to school continued and the number was only marginally less than in 1970. Immigrant children are still arriving in the City at a rate of 1,400 or so each year. Details of the findings at these examinations are recorded elsewhere in this report but from the results, it is clear the medical examination is first and foremost very much in the interests of the immigrant child. Every aspect of the child's mental and physical condition is brought under review. Investigation and treatment are arranged where necessary. There is intercommunication between the School Health Service staff, the general practitioner and the hospitals or other agencies to provide the best possible advice and treatment.

During the spring term, Dr. C. K. Campbell, a member of the staff of the Medical Research Council, carried out an investigation at several of the Primary Schools where there was a history of tinea capitis (head ring worm) among the children. The aim was to find the most important means of spread of infection and to determine whether any additional precautions are needed to prevent it. This environmental study was thorough and well conducted and it provided useful information about cross infection. There is comfort in the

conclusion that classrooms are not a source of infection and that vigorous disinfection measures are not necessary in a school when there has been an outbreak of ringworm of the scalp but it is realised that this small survey is insufficient for complete elucidation of the problems.

In 1967 a urine screening project was carried out in schools in the Northfield area of the City by Dr. H. R. White and Dr. S. R. Meadow, both of the Birmingham Children's Hospital, and Dr. N. Johnston. This was briefly reported in the Annual Report for that year and the results were published in the British Medical Journal. Further screening has been carried out in schools in the Harborne area, on girls only, by Dr. Bridget Smith of the Birmingham Children's Hospital and results so far obtained indicate incidence higher than found in the 1967 survey. The results will be published when completed. The general recommendations of the medical team are that the results indicate the need for a careful long-term study to evaluate the economics and implications of screening on a national scale.

These projects are examples of the ever increasing scope of modern techniques in medicine which reflects upon and adds interest to the routine work of medical officers and nurses so that they can keep abreast of the times.

The success of the efforts of those working in the School Health Service depends upon the willing help of many others; the Teachers, the Education Welfare and Attendance Officers, the staff of the Child Guidance Service, members of the Youth Employment Service, After-Care Officers and many outside agencies. I am grateful to all of them for this assistance and to the Chairman and members of your Committee for support and encouragement.

E. L. M. MILLAR

#### GENERAL INFORMATION

##### NUMBER OF SCHOOLS:-

Nursery .. .. .	31
Primary .. .. .	329
Secondary (Non-selective) .. .. .	73
Grammar and Technical .. .. .	34
Bi-lateral and Comprehensive .. .. .	21
Special .. .. .	40
Country Study Centres .. .. .	3
Total .. .. .	531

Number on rolls at end of year:-

Primary and Secondary Schools (including Nursery Schools)	188,859
Special Schools .. .. .	3,501



## STAFF

For the second year running, the post of Deputy Senior Administrative Medical Officer has been affected by change and Dr. Aidney has been promoted to take over the duties. Dr. Harrison, who held the post for a year, accepted an appointment with the Regional Hospital Board and left the service in April.

With the appointment of Dr. Vaccaro and Dr. May to fill the two vacancies the four posts for Senior Clinical Medical Officers are now filled. It is a pleasure to welcome back Dr. May who served as a clinic medical officer for a number of years before she left a year ago. The Senior Clinical Medical Officers are responsible for the ascertainment and care of handicapped children and it is reassuring to know that this important part of the work now has a full complement of staff.

Four of the full-time medical officers working in clinics left the service during the year—Drs. d'Amian, Khan, St. Johnston, and Diane Millar. Dr. Alliot was appointed but resigned six months later. Full-time appointments were accepted by Drs. Spencer and Loizou, Dr. Sen became full-time after some years as a part-time medical officer and Dr. Edwards was appointed to a part-time post. The result, therefore, is that the numerical strength is approximately one less than it was a year ago.

No less than 24 nurses left the service during the year, including six who retired on pension. By the end of the year only 13 replacements had commenced duty but another six began work in January, 1972, and five new part-time appointments helped to fill the gap. In recent years there have been about 20-25% of vacancies to be filled in the nursing establishment and 1971 has been remarkable in that the number has increased to over 33.3%. There is no reason to suppose that the rate will further increase however; the year has been a peak year for retirement on age grounds.

Two full-time speech therapists resigned and one was appointed. Efforts continue to recruit more staff to deal with the volume of work but staff shortages are common everywhere in the Country and the prospects are not good.

# MEDICAL AND DENTAL INSPECTION AND TREATMENT

## MEDICAL INSPECTION

The medical inspection of pupils continues according to the established pattern and children are seen as soon as possible after entry to school and during the last year of school attendance when there is an opportunity to take into account fitness and suitability for the various possible kinds of employment.

### Percentage of parents attending with children in the various age groups:

<i>Year of Birth</i>									<i>Boys</i>	<i>Girls</i>
									<i>Percentage</i>	<i>Percentage</i>
1967 and later	..	..	..	..	..	..	..	..	96.8	97.6
1966	..	..	..	..	..	..	..	..	96.1	94.9
1965	..	..	..	..	..	..	..	..	95.6	94.5
1964	..	..	..	..	..	..	..	..	93.8	94.2
1963	..	..	..	..	..	..	..	..	80.1	83.5
1962	..	..	..	..	..	..	..	..	64.7	75.3
1961	..	..	..	..	..	..	..	..	77.5	77.6
1960	..	..	..	..	..	..	..	..	80.9	85.8
1959	..	..	..	..	..	..	..	..	73.7	79.2
1958	..	..	..	..	..	..	..	..	40.5	46.8
1957	..	..	..	..	..	..	..	..	29.7	40.4
1956 and earlier	..	..	..	..	..	..	..	..	25.9	30.7

### Classification under the heading Physical Condition on the School Medical Record.

The classification of children as 'unsatisfactory' is a matter of standards for each of the medical officers carrying out medical inspections, but through the years, on average, there is little variation in the statistics. In 1971 the number of children classified as unsatisfactory was fractionally above 1% and in the main these are the children most likely to need follow-up procedures although, of course, many others are referred for specific advice or treatment whose physical condition is not so classified.

The relevant findings for the year under review follow according to this classification :

<i>Age groups inspected (By year of birth)</i>	<i>Number of pupils inspected</i>	<i>Physical condition of pupils inspected</i>			
		SATISFACTORY		UNSATISFACTORY	
		<i>Number</i>	<i>% of col. 2</i>	<i>Number</i>	<i>% of col. 2</i>
		(3)	(4)	(5)	(6)
1967 and later . .	1,862	1,840	98.82	22	1.18
1966 .. ..	6,377	6,305	98.87	72	1.13
1965 .. ..	7,407	7,341	99.11	66	0.89
1964 .. ..	3,428	3,393	98.98	35	1.02
1963 .. ..	996	974	97.79	22	2.21
1962 .. ..	602	577	95.85	25	4.15
1961 .. ..	614	600	97.72	14	2.28
1960 .. ..	1,235	1,222	98.95	13	1.05
1959 .. ..	650	643	98.92	7	1.08
1958 .. ..	183	177	96.72	6	3.28
1957 .. ..	2,333	2,323	99.57	10	0.43
1956 and earlier	9,971	9,896	99.25	75	0.75

### MINOR AILMENT AND INSPECTION CLINICS

The 15 school clinics provide facilities not only for consultation by medical officers and the treatment of minor ailments but also regular treatment sessions for dentistry. Most of them are equipped with a U.V.R. treatment room and eleven also have a physiotherapy gymnasium.

Parents are glad to avail themselves of the facilities the clinics afford. The advice and help of nurses is available every afternoon and the medical officers hold consultation clinics several times a week.

Child Guidance Clinics : 29 George Road, Birmingham B15 1PJ.

23B Lozells Road, Birmingham B19 2TL.

201 Sladefield Road, Birmingham B8 2SY.

455 Yardley Wood Road, Birmingham B13 0TA.

Speech Therapy sessions are held at the Child Guidance clinics above. Dental sessions are also held at Nechells Green Health Centre, Treafoord Lane, Carnegie Institute, Farm Road and Quinton Personal and Child Health Centres.

At the Consultation and Assessment Clinic, Canterbury House, 85 Newhall Street, an asthma clinic is held twice weekly attended by a chest physician; an aural clinic attended by E.N. & T. specialists is a daily feature. 528 ascertainment sessions were held by school medical officers and a medical ophthalmologist (responsible for the ascertainment of blind

and partially sighted children) attends twice weekly. Sessions for the examination of immigrants are held as required. There were 245 during 1971.

Sessions are arranged as necessary for the medical examination of manual and non-manual staff at various clinics.

The number of sessions devoted to particular forms of treatment varies according to demand and the following table indicates the number of sessions usually held.

Clinic	Number of schools	Work undertaken (No. of sessions per week)					
		Minor ailments and consultations		Refraction	Orthopaedic	U.V.R.	Dental
		Doctor sessions	Total attendances				
Aldridge Road, Great Barr ..	17	2	3,715	0.5	2	—	10
Albert Road, Aston ..	26	2	2,688	1.0	—	—	19
Albert Road, Harborne ..	50	2	5,695	1.5	6	1	16
Church Lane, Kitts Green ..	40	2	3,395	1.5	—	2	16
Harvey Road, South Yardley	29	1	7,567	0.5	2	2	14
Lancaster Street ..	32	3	8,482	1.5	5	2	51
Ladywood Middleway ..	30	1	6,267	—	—	2	17
Maas Road, Northfield ..	48	1	4,640	1.5	6	1	16
Mowbray Street ..	36	2	7,666	0.5	3	2	19
Slade Road, Erdington ..	40	3	3,547	0.5	—	3	16
Soho Hill, Handsworth ..	40	3	9,916	1.5	4	—	14
Stratford Road, Sparkhill ..	34	2	7,487	1.0	5	2	13
Warren Farm Road, Kingstanding ..	15	2	5,527	0.5	4	—	13
Warstock Lane, Kings Heath	39	1	6,741	1.0	4	2	7
Yardley Green Road, Little Bromwich ..	32	2	6,251	0.5	—	2	14

Chiropody and orthodontic treatment are provided at Lancaster Street Clinic.

Physiotherapists attend special schools formerly junior training centres weekly by arrangement.

## IMMIGRANT CHILDREN

A summary of the defects found at the special clinics which have been held throughout the year for the examination of immigrant children is given below:

Total number examined	..	..	..	..	..	..	..	1,463
Defects found:-								
Skin	..	..	..	..	..	..	..	11
Eyes a) Vision	..	..	..	..	..	..	..	193
b) Squint	..	..	..	..	..	..	..	12
c) Other	..	..	..	..	..	..	..	10



Ears a) Hearing .. .. .	3
b) Otitis media .. .. .	3
c) Other .. .. .	4
Nose and Throat .. .. .	27
Speech Defects .. .. .	4
Heart Murmurs .. .. .	4
Chest: a) Asthma .. .. .	5
b) Bronchitis .. .. .	3
Orthopaedic .. .. .	22
Hernia .. .. .	70
Cervical and Endocrine Glands .. .. .	15
Obesity .. .. .	3
Paralysis (History of Polio) .. .. .	1
Tuberculosis - Heaf Tests	
Positive results: Grade I .. .. .	413
Grade II .. .. .	28
Grade III .. .. .	62
Grade IV .. .. .	7
Stool Tests:	
Ova discovered .. .. .	202
Cysts discovered .. .. .	32
Shigella sonnei .. .. .	4

Sickle cell testing was undertaken for all the children attending the immigrant clinic and there were 15 positive results. This indicates that about 1% might be expected to show a positive reaction and from May onwards medical officers were asked to arrange tests for any other children of West Indian or Asian origin already in the schools. In this way many immigrants who did not have a sickle cell test in previous years, were dealt with.

This resulted in 93 abnormal haemoglobin reactions and it is significant enough to stress the value of sickle cell testing of immigrants as a normal routine. The burden of all this extra work was undertaken by the Department of Clinical Chemistry at the Birmingham Children's Hospital and we are most appreciative of their ready co-operation.

The medical officers undertaking the examinations took a great deal of trouble to make sure that nothing escaped unnoticed and where necessary, the general practitioners were contacted, either to seek information or to give it.

The routine examination of immigrants has now become an established pattern and the procedures provide an invaluable first assessment of the physical condition of each child. All indications for further action are followed up and the introduction of this medical examination before an immigrant child is admitted to school has proved to be very well worth while.

The general cleanliness of the children examined was good although some nits were found in the hair of 64 children. The Birmingham Children's Hospital continued to provide x-ray facilities for the assessment of bone age and 13 cases were referred.

## ULTRA-VIOLET RAY TREATMENT

Treatment by ultra-violet rays is still of value in certain cases particularly acne, certain skin conditions, bronchitis and ear, nose and throat conditions. 556 children were treated and 288 of them showed improvement at the end of the course of treatment. Only 69 failed to benefit but 199 children did not complete the course.

## REPORT OF THE WORK OF THE SCHOOL HEALTH NURSING STAFF

Mrs. V. M. Lutwyche, Principal Nursing Officer, reports:-

"The year 1971 has been an eventful one for the School Health Service. On May 1st the administrative offices for the service moved from Scottish Life House, Great Charles Street, to share premises with the other Public Health staff in Trafalgar House, Paradise Street. Whilst deciding which records would be required in the new offices, reports of past years were found hidden away amongst many other interesting literary articles. On looking through some of these reports, it was noted that although the school medical department officially began its work on September 1st, 1908, pioneer inspections had been carried out in Birmingham long before this date. Eventually, after legislation, and not without heated debate in Parliament, evolved the school health service.

The members of the Birmingham School Board must have lived up to the city's motto, and were FORWARD looking. It is hoped that members of future controlling authorities will continue to be so, when the well-being of children is considered. In the past the School Health Service has made a special contribution to the field of preventive medicine. Quite rightly, in these days much thought is being given to the needs of the aged population in the community; but let not the fact be forgotten that 'the child is father of the man'.

The recently published Consultative Document has given no clear indication of the future plans for the school health service. This feeling of uncertainty about the service, has made recruitment of both nursing and medical staff more difficult.

Six members of the nursing staff reached retirement age during 1971, after giving many years of valuable service to the school children of Birmingham. The school nurses were very much involved when the question of free milk for school children over seven years of age was being assessed. The examination of these children carried out in schools and clinics involved a great deal more than the usual amount of travelling time being spent by all staff. In addition, there was extra clerical work, which was often taken home to be completed in the staff's own time.

Sheep Street School Clinic, the second school clinic to be specially built in Birmingham, and officially opened in 1926 by Sir Humphrey Rollason, K.C.B., M.D., was closed in September of this year. Lancaster Street clinic is now being used as a medical centre for the schools in this section of the City. The facilities available at the new premises are certainly an improvement, but much is to be desired regarding the accessibility to the clinic, and parking space is a big problem for both patients and staff. It is hoped with co-operation and goodwill, that these difficulties can be overcome, and full use made of these premises.

### Follow-up and Home Visiting

The number of children followed-up by the school nurses, because of defects found at medical inspections, nurses' general surveys, vision surveys, etc., has increased from 3,674

in 1970 to 5,548 during this year. It was necessary to refer 839 of these children to the school medical officer or general practitioner for further advice; 1,387 were recorded as requiring further observation, and the remainder were found to be progressing satisfactorily. This increase of follow-up work by the nursing staff, is partly due to the decrease in the number of sessions of the medical officers in schools.

Home visiting is a very important aspect of the school nurses' work. The health and welfare of the school child is best served if the staff of the service and the teachers work as colleagues in a joint enterprise, and together obtain the assistance of the parents. This liaison is greatly helped by visiting homes of children who have some problem or medical condition. Whilst talking to parents in their own houses, the school nurse is able to detect need, deprivation, and notice other conditions which might not be obvious when the child is being examined in school.

Some of the nursing staff attend and lecture at Parent-Teacher Association meetings in their own time, and in this way have social contact with parents.

The following table shows a marked decrease in the number of visits made by the school nurses. This is partly due to the shortage of staff, and selective home visits have then been made which often involved intensive, comprehensive reports being obtained. Another difficulty has been the need for homes to be visited in the evenings when parents have returned from their work, or there is someone present who can act as interpreter.

<i>Reason for Visit</i>	1967	1968	1969	1970	1971
All forms of neglect (including verminous conditions) ..	2,146	2,012	1,672	1,817	1,374
Other environmental conditions	1,418	1,329	1,478	971	1,013
Behaviour problems .. ..	201	232	268	189	116
All medical defects (including the handicapped) .. ..	4,060	4,572	3,587	2,921	2,771
No access visits .. ..	2,163	2,450	2,244	1,682	1,065
	9,988	10,595	9,249	7,580	6,339

## Vision Surveys

As explained in previous reports, it is important that a suitable, quiet room is available when vision is being tested. The staff are grateful to the head teachers who give up their private rooms in the schools, where there is no medical room, so that vision surveys and other duties can be carried out.

The recently purchased Keystone apparatus has some advantages over the more orthodox methods of testing vision, but difficulties do arise regarding transporting this machine to schools and clinics.

It is sad to note from the following table, that over one third of the school children prescribed spectacles (free of charge), were not wearing them at the time of survey. Is this another aspect of lack of parental control or interests, in this day and age?

76,612	children were tested during 1971.
63,897	had normal vision.
4,772	were referred for observation.
3,431	were referred to medical officers.
3,071	had defects corrected by spectacles.
1,441	were not wearing spectacles at time of testing, but should have been.

## **Nurses' General Survey**

Often the question is asked, what are the duties of a school nurse? One of her many duties is the screening of children for any visible defect or deviation from the normal standard of health or parental care. When a defect is obvious, the parent usually seeks medical advice, but one of the values of preventive medicine is early detection; thus avoiding a serious complaint developing. As a result of this screening procedure, during 1971, 3,689 school children having some defect were referred to the school medical officers or to the general practitioners.

In addition to the general surveys in schools, special surveys have been carried out for the detection of ringworm, plantar warts, scabies, etc.

## **Nursery Schools and Classes**

As the medical officers have not been able to carry out as many inspections in the nursery schools as in previous years, this has left the nursing staff, with the co-operation of the teaching staff, to refer children to the school medical officer consultation sessions at the local clinic or to the general practitioners. Mothers have appreciated the interviews and health talks given by the nurses in the nursery schools and classes.

## **Health Education**

The need for boys and girls, whilst still at school, to be taught about healthy living—by example perhaps more than by precept—is a challenge to all adults. It is sad to report that many children still smoke cigarettes, in spite of all that has been said or written about the close connection of lung cancer and smoking. Often the money for cigarettes has been provided by the parents.

During 1971, the school nursing staff gave numerous informal talks to groups of children and parents in schools and clinics, in addition to regular organised sessions arranged with the teaching staff.

The School Health staff appreciate the co-operation of their colleagues in the Health Education Section when advice is sought regarding equipment, etc.

## **Work in the School Clinics**

The pattern of work in the clinics is changing, partly due to the moving population and the City's re-housing programme. In some areas, the minor ailment sessions are a necessity and are well attended. Other clinics have an increase in the number of refraction, assessment, consultation and adult medical sessions. Whatever the change has been, the staff have adapted to the needs of the locality.



The need for clerks to relieve nurses of clerical duties is a priority—this would enable the nurses to have more time to deal with the problems and difficulties of the individual child. It is often forgotten that the period between five years and 16 years is the most formative, and these children will be the parents of the future.

### **Specialist Clinics—Canterbury House Asthma Clinic**

The number of children attending this busy clinic was much the same as in 1970. The two full-time members of staff who, in addition to organising these busy sessions twice weekly, attend and liaise with the staff at Dudley Road Hospital, carry out special surveys and visit homes in all areas of the City.

Students and visitors from various Authorities have written to express their interest and appreciation to the staff, for sparing their valuable time to explain procedures, etc.

### **Ear, Nose and Throat Department**

The staff of this department have helped to train and lecture to students from different Authorities, in addition to carrying out their normal duties. This has often meant that clerical work has been completed at home. However, it is good to be able to report that more clerical help has now been forthcoming, and it is hoped the demands of this busy department will be met in the future.

### **Handicapped Children**

Nursing staff from other clinics have helped in the assessment of handicapped children, whilst one of the permanent staff is training for the Health Visitors' Certificate. Children, whose parents have failed to keep appointments for assessment, have been visited by nurses from the local clinics. The reason for non-attendance has been investigated, and another appointment offered.

Eighty-four sessions were taken for journeys escorting the handicapped children to and from residential schools. (These escort duties sometimes involved the nursing staff being away from home for a night).

### **Partially Sighted Refraction Clinic**

(Mr. Mark Tree's comments regarding this department appear elsewhere in the report).

The health visitor attached to this specialist clinic takes a great interest in the patients who attend, and also regularly visits and follows-up those children in the partially sighted schools.

### **Immigrant Clinic**

The examination of immigrant children before entering school continues. Although the duties of the nursing staff have increased, and social problems have become more complex, the staff establishment number has not altered. At times this situation has caused much thought to be given to which aspect of the work has the greatest priority, but thanks to the co-operation of the nurses, all emergencies have been met at these clinic sessions.

## The Work of the Nursing Assistants

During 1971, 90,648 children were inspected and followed-up for pediculosis by the nursing assistants.

In clinics where there are bathing facilities, 1,140 individual children (including pre-school children) were treated for scabies. 2,379 baths were given for scabies during the year. 304 children were bathed for septic conditions. 268 children were treated for generalised impetigo. These children had been referred to the centres, either by the general practitioner or the school medical and nursing staff.

The supervision of children from socially handicapped or problem families needing special support is given in these centres—606 children from 194 homes attended for regular bathing and attention throughout the year.

The close supervision of these children often prevents the break-up of a family, thus avoiding the necessity of the children being taken into care.

The nursing assistants have a thankless task to perform—sometimes having to listen to abuse from irate, inadequate parents, and often travelling across the city to help colleagues treat a difficult family. Occasionally an ex-pupil visits the clinic to express gratitude for help and kindness shown in the past, and the nursing assistants then know their work has been worthwhile.

Mention must be made of the school welfare officers with regard to this aspect of the work. Their help and co-operation is very much appreciated by all of the school nursing staff.

It is encouraging to report that despite many difficulties throughout 1971, the pediculosis rate has decreased slightly, as the following table indicates.

	1966	1967	1968	1969	1970	1971
Infestation rate % .. .. .	7.5	7.0	7.0	6.8	7.5	7.3
Number of children cleansed on statutory cleansing orders ..	1,845	1,835	1,721	1,389	1,653	1,462
Total number of statutory clean- sings .. .. .	2,646	2,585	2,514	1,992	2,300	2,264
Cleansing demonstrations to mothers .. .. .	549	662	661	440	836	805
Prosecutions under Section 54 ..	15	26	6	22	20	—
Number of children involved ..	29	42	6	46	43	—

## EYE DEFECTS

The number of children examined in the routine age groups who suffered from defective vision (excluding squint) was:

<i>Age group inspected (By the year of Birth)</i>	<i>Number of pupils examined</i>	<i>Number found to have defective vision</i>	<i>Percentage</i>
1967 and later .. .. .	1,862	32	1.72
1966 .. .. .	6,377	188	2.95
1965 .. .. .	7,407	320	4.32
1964 .. .. .	3,428	141	4.11
1963 .. .. .	996	62	6.22
1962 .. .. .	602	69	11.46
1961 .. .. .	614	67	10.91
1960 .. .. .	1,235	105	8.50
1959 .. .. .	650	62	9.54
1958 .. .. .	183	34	18.58
1957 .. .. .	2,333	245	10.50
1956 and earlier .. .. .	9,971	1,262	12.66
<b>TOTAL .. .. .</b>	<b>35,658</b>	<b>2,587</b>	<b>7.26</b>

Mr. Mark Tree reports:-

“I am pleased to report on the year’s work at the Ophthalmic Clinic at Canterbury House.

I append as usual an analysis of the refractive errors seen.

Moderate myopia and astigmatism .. .. .	20%
High myopia .. .. .	6%
Hypermetropia and astigmatism .. .. .	44%
Mixed astigmatism .. .. .	7%
Squint cases .. .. .	7%
No spectacles ordered .. .. .	16%

The percentage of cases of myopia has shown an increase, in particular in the range of high defects. Similarly the number of cases where no spectacles were ordered has also increased.

I believe this is due to the increasing numbers of immigrant children examined, among whom the high myopes have hitherto lacked attention in their country of origin. Our own school service is not only supplying their needs but is investigating others as a matter of routine to facilitate their integration.

There has been an increasing interest in the subject of retinal degenerative changes and the importance of their early recognition. Often these are inherited defects and the family history is important. As the retina is a specialised nerve-tissue structure it is not surprising that some cases are complicated by serious brain affection—the so-called cerebromacular degeneration. I have recently seen several cases without brain affection, in which no history of family involvement was present, and in which gradual visual deterioration occurred. Detailed examination of the retina after dilation of the pupils by mydratic drops is essential to reveal the changes. Recent tests also include the variations in electrical response on stimulating the eye—termed the “visual evoked cerebral response”.

## CHIROPODY CLINIC

There have been several changes in personnel during the year. Mrs. C. Robinson joined the staff in February but Miss R. Lake and Mrs. S. R. Browne left the service during July and August respectively. Mrs. Browne has carried out a large share of the work for the past ten years and is greatly missed.

Corrective work carried out at this clinic has been the subject of lectures given at Bristol and Shewsbury during 1971. Birmingham School of Chiropody has been helpful in accepting several children and making corrective appliances for them.

The move from Sheep Street to Lancaster Street has led to a decline in attendances but it is hoped attendances will soon return to normal.

## ANALYSIS 1971

								<i>Number of cases</i>
Plantar warts—single .. .. .	..	..	..	..	..	..	..	132
Plantar warts—multiple .. .. .	..	..	..	..	..	..	..	87
Corns .. .. .	..	..	..	..	..	..	..	66
Callouses and hyperkeratosis .. .. .	..	..	..	..	..	..	..	32
Nail conditions .. .. .	..	..	..	..	..	..	..	51
Pes cavus .. .. .	..	..	..	..	..	..	..	5
Pes valgus .. .. .	..	..	..	..	..	..	..	30
Hallux valgus .. .. .	..	..	..	..	..	..	..	60
Other conditions of 1st segment .. .. .	..	..	..	..	..	..	..	1
Various conditions of lesser toes .. .. .	..	..	..	..	..	..	..	108
Metatarsalgia .. .. .	..	..	..	..	..	..	..	2
Painful heels .. .. .	..	..	..	..	..	..	..	7
Bursitis .. .. .	..	..	..	..	..	..	..	3
Tinea pedis .. .. .	..	..	..	..	..	..	..	4
Chilblains .. .. .	..	..	..	..	..	..	..	3
Foreign bodies .. .. .	..	..	..	..	..	..	..	4
Sundry other conditions .. .. .	..	..	..	..	..	..	..	26

---

621

---



Total number of new cases .. .. .	459
„ „ „ re-examinations .. .. .	1,302
„ „ „ attendances .. .. .	1,761
„ „ „ treatments .. .. .	2,198
„ „ discharged .. .. .	384
„ „ referred for further treatment .. .. .	20
„ „ still under treatment .. .. .	146
„ „ of cases of verruca discharged .. .. .	217
„ „ „ attendances before discharge .. .. .	1,080
Average attendances per case of verruca .. .. .	4.98

### Summary of foot inspections carried out at schools during 1971.

Five schools were visited and the children seen were all aged 7-9 years.

	<i>Girls</i>	<i>Boys</i>
Number of children seen .. .. .	295	296
Conditions observed:		
Pes valgus .. .. .	83	81
Pes cavus .. .. .	—	1
High arches .. .. .	10	10
Hallux valgus .. .. .	45	25
Hallux varus .. .. .	12	28
Other conditions of 1st segment .. .. .	11	7
Hammer toes .. .. .	—	1
Latero-medial curvatures .. .. .	87	98
Overriding 2nd .. .. .	2	5
Overlapping 5th .. .. .	10	12
Rotated 5th .. .. .	17	28
Other irregularities of lesser toes .. .. .	12	22
Corns .. .. .	39	35
Callouses .. .. .	8	2
Verrucae .. .. .	5	9
Onychocryptosis .. .. .	—	2
Thickened nails .. .. .	21	17
Other nail conditions .. .. .	1	1
Hyperidrosis .. .. .	—	1
Genu valgum .. .. .	11	5
Footwear		
Short .. .. .	126	92
Inadequate in other ways .. .. .	67	10
Referred for treatment		
Chiropody .. .. .	83	82
Physiotherapy .. .. .	4	1

## ASTHMA CLINIC

Dr. J. Morrison Smith, Chest Physician, reports:-

"The volume of work remained at about the same level as in 1970. There were 257 new cases seen of which 181 were referred directly by their own family doctors and 76 by medical officers in the School Health Service with the approval of their family doctors.

The total number of consultations was 5,330, including 868 patients seen at the paediatric out-patient department at Dudley Road Hospital. The graph illustrates how the work of the Clinic has increased in recent years.

### Changes in the Prevalence of Asthma

During the year an article was published in the first number of the new journal 'Clinical Allergy' giving the findings of a study of the prevalence of asthma in a sample of 20,000 of the school children in Birmingham. This work was carried out with the help of the doctors and nurses in the School Health Service and of the computer at the Birmingham University Medical School. The expenses incurred in processing the information were met from a small research fund for asthma which is held by the Treasurer of the East Birmingham Hospital Group.

The reason for carrying out this study was that when it was first noted that death from asthma in children had become more common between 1960 and 1966 the reasons for this were in doubt. One possible explanation was a rise in the frequency of the condition. Since a previous study of the prevalence of asthma in school children in Birmingham had been carried out in 1956-57 a further study could be done and the results compared.

The following questions were asked:-

1. Has the child ever had asthma?
2. Has he/she ever had wheezing and shortness of breath not definitely diagnosed as asthma?
3. Has the wheezing or asthma been present in the last six months?

The results showed that definite asthma, present in the last six months was found in 2.3% and wheezing, which was almost certainly mild asthma in a further 3.2%. The mild wheezing attacks tend to clear up in adolescence in both sexes but the more definite asthmatic is less likely to recover.

Compared with 1956-57 there has been an increase of at least 47% in the prevalence of asthma in a period of 12 years. The reasons for this increase are not known but it is likely that the findings in Birmingham are not unusual. Recent studies of the prevalence of asthma in Aberdeen and in Melbourne gave similar results to those in Birmingham.

Another interesting aspect of this work was the finding that asthma occurred more than ten times as frequently in children born in Birmingham of West Indian parents compared with children of West Indian parents who had been born in the West Indies and come to Birmingham during childhood.

It has also been found that very few immigrant children coming to England and medically examined before starting school have asthma if they were born in either Asia or in the West Indies, yet we have many children who were born in Birmingham of immigrant parents referred to the Asthma Clinic for advice.

There must be some very important factor in the environment of children in Birmingham which leads to a high prevalence of asthma. This prevalence is increasing steadily and it would seem to be well worth while to investigate the reasons further since it might lead to a knowledge of how to prevent this distressing disease in childhood. Part of any such study might have to be carried out in one of the countries, such as Jamaica, from which many immigrants to Birmingham have come.

## **Other Research**

We have continued to study the long-term effects of disodium cromoglycate ('Intal') on asthma. We have been particularly interested in the long-term safety of this drug, and in tests to see if our patients really continued to follow the advice given about treatment.

A small clinical trial of desensitisation using a specially prepared extract of *Dermaphagoides pteronyssinus* (the house dust mite), supplied by the Bencard Allergy Unit of Beecham Laboratories has been started. We know that a very high proportion of asthmatic children in Birmingham are sensitive to this mite and that it can be found almost invariably in the dust from their houses.

## **Hot Air Central Heating**

Central heating by circulation of warmed air is becoming common in both municipal and privately owned houses and flats in Birmingham. It may be worth noting that a number of cases have been encountered where this type of heating system has been reported to have had an adverse effect on asthma in children. Since house dust is known to be a very frequent cause of asthma in sensitive people it seems likely that the effect of this type of heating is to circulate continuously through the house air containing minute particles of dust, thus exposing these patients to the inhalation of dust continuously. Filtration of the circulating warmed air would theoretically be possible but in practice very difficult because the particles concerned are so small that filtration would probably be impractical on the grounds of expense. Further investigation of this problem might be desirable.

## **Staff**

It is again a pleasure to record the help of Dr. L. F. Dale and Dr. P. K. Mukherjee in the work of the clinic and the co-operation of the medical officers in the School Health Service.

Of the nursing staff attached to the clinic it is difficult to express the debt which both the patients and the doctors owe to them for their unfailing skill, kindness and courtesy throughout this and many other years. In addition to the clinic sessions the school health visitors carried out 219 successful visits to patients' homes and a further 47 where access was not obtained. These visits have become increasingly difficult because of the high proportion of mothers in full-time occupations. They are, however, an essential part of the work and have frequently been carried out at times outside the normal hours of duty.

## **References**

Smith, J. M., Harding, L. K. and Cumming, G. 'Clinical Allergy', 1, 57, 1971."



ASTHMA CLINIC — NEW CASES

300

200

100

308



57

58

59

60

61

62

63

64

65

66

67

68

69

70

71



## ORTHOPAEDIC DEFECTS

Mr. H. Piggott, F.R.C.S. has continued to hold sessions at Mowbray Street Clinic. He examines those children referred by the school medical officers where the need for consultant advice is evident. All the physiotherapists attend his clinics so that they not only benefit by the advice about treatment that is given for patients under their care but they also see children brought forward by their colleagues.

This is a valuable means of keeping them abreast of modern methods of treatment over a wide range of orthopaedic conditions and also provides a regular opportunity for them to meet together and exchange ideas.

### SUMMARY AND ANALYSIS OF THE CASES TREATED IN THE PHYSIOTHERAPY SERVICE

<i>Reason for Attendance</i>	<i>No. of Children Treated</i>	<i>No. of Attendances</i>
Remedial Exercises ..	1,337	13,553
Massage .. .. .	35	353
Radiant Heat .. ..	40	223
Electrical Treatment ..	13	180
Other Purposes .. ..	270	1,049
<b>TOTAL .. .. .</b>	<b>1,695</b>	<b>15,358</b>

Number of physiotherapists in post at 31st December, 1971:

Full-time 2    Part-time 8    Total full-time equivalent 5.0

### RESULTS OF TREATMENT

<i>Defect</i>	<i>Number Treated</i>	<i>Cured or much Improved</i>	<i>Slightly Improved</i>	<i>Unchanged</i>	<i>Dis-continued Treatment</i>
Spinal conditions .. ..	123	65	25	21	12
Poor muscle tone .. ..	56	28	15	8	5
Various forms of paralysis ..	51	9	27	10	5
Deformities of the foot ..	742	266	217	127	132
Asthma .. .. .	132	70	38	10	14
Bronchiectasis .. .. .	2	—	2	—	—
Bronchitis .. .. .	161	92	30	21	18
Injuries .. .. .	34	20	8	5	1
Torticollis .. .. .	6	2	1	2	1
Knock knees .. .. .	38	11	9	15	3

# Results of Treatment (continued)

<i>Defect</i>	<i>Number Treated</i>	<i>Cured or much Improved</i>	<i>Slightly Improved</i>	<i>Unchanged</i>	<i>Dis-continued Treatment</i>
Painful knees .. .. .	8	2	1	4	1
Pseudo hypertrophic muscular dystrophy .. .. .	1	—	—	1	—
Late milestones .. .. .	1	—	—	1	—
Squinting patellae and external torsion of tibiae .. .. .	1	—	—	1	—
Internal rotation of hip .. .. .	1	—	—	1	—
Cystic fibrosis .. .. .	3	—	—	3	—
Arthritis .. .. .	1	—	—	1	—
Spastic .. .. .	6	—	—	6	—
Internal rotation of legs .. .. .	4	—	—	4	—
Muscular dystrophy .. .. .	1	—	—	1	—
Congenital absence of forearm	1	—	—	1	—
Contracted fingers .. .. .	1	—	—	1	—
Osgood Schlatter's disease .. .. .	3	—	—	3	—
Chilblains .. .. .	1	1	—	—	—
Pain in back .. .. .	1	1	—	—	—
Stress incontinence .. .. .	1	1	—	—	—
Morquois disease .. .. .	1	—	—	1	—
Joint pains .. .. .	1	—	—	1	—
Dysmenorrhoea .. .. .	7	7	—	—	—
Fibrositis .. .. .	2	1	—	—	1
Cerebral palsy .. .. .	6	—	2	4	—
Spina bifida .. .. .	2	1	1	—	—
Pains in shoulder .. .. .	1	1	—	—	—
Pain in 1st metatarso phalangeal joint .. .. .	1	1	—	—	—
Chondromalacia patellae .. .. .	1	—	1	—	—
Spastic muscles .. .. .	1	—	1	—	—
Genu valgum .. .. .	3	1	1	—	1
Debility .. .. .	24	13	8	—	3
Ear, nose and throat conditions	18	14	—	1	3
Acne .. .. .	2	2	—	—	—
Skin conditions .. .. .	2	2	—	—	—
TOTAL .. .. .	1,452	611	387	254	200

Total number of individual children treated during the year :- 1,446

A summary and analysis of the cases seen by the Orthopaedic Surgeon is given below:-

## Spine:

Kyphosis .. .. .	6
Spina bifida .. .. .	1
Scoliosis .. .. .	11
Torticollis .. .. .	11

# Lower Limbs:

Pes cavus .. .. .	11
Hallux valgus .. .. .	9
Hallux rigidus .. .. .	1
Pes valgus .. .. .	4
Knock knees .. .. .	39
Osgood Schlatter's disease .. .. .	6
Hammer toe .. .. .	4
Internal torsion, both femurs .. .. .	1
Internal torsion, left tibia .. .. .	1
Painful heels .. .. .	1
External rotation of right tibia and fibula following fracture .. .. .	1
Discoid menisci .. .. .	1
Squinting patellae and external torsion of tibiae.. .. .	1
Internal rotation of hip .. .. .	2
Painful knee .. .. .	5
Peroneal flat feet .. .. .	1
Internal torsion of leg .. .. .	2
Paralysis of tibialis anterior .. .. .	1
Short leg with paralysis of tibialis anterior .. .. .	2
Short leg .. .. .	2
Short tendo-achilles .. .. .	1
Talipes equino-varus .. .. .	2
Lax ligaments .. .. .	1
Heel bunion .. .. .	1
Bunion 5th toe .. .. .	1
Chondromalacia patellae .. .. .	1
Torn lateral ligament in ankle .. .. .	1
Pain in 1st metatarso phalangeal joint .. .. .	1
Pain in hip .. .. .	2
Pigeon toed .. .. .	3
Varus deformity of foot .. .. .	1
Knee flexion deformity .. .. .	2
Exostosis head of first metatarsal .. .. .	1
Congenital dislocation of hip .. .. .	1
Bony structure under heel .. .. .	1
Congenital deformity 2nd toe .. .. .	1

Deformed little toes	..	..	..	..	..	..	..	1
Cut tibialis anterior	..	..	..	..	..	..	..	1
Injury to knee	..	..	..	..	..	..	..	1
Upper Limbs:								
Congenital absence of left forearm	..	..	..	..	..	..	..	1
Contracture of fingers	..	..	..	..	..	..	..	1
General								
Rickets	..	..	..	..	..	..	..	1
Depressed sternum	..	..	..	..	..	..	..	1
Cerebral palsy	..	..	..	..	..	..	..	11
Deformity of thorax	..	..	..	..	..	..	..	1
Total number of defects	..	..	..	..	..	..	..	164
Total number of individual children seen	..	..	..	..	..	..	..	161

### CONVALESCENT TREATMENT

The Education Committee provides a fund to enable a limited number of children recovering from acute illness to have a period of convalescence. Approval is given in selected cases recommended by the doctor in charge of the case and where the parents cannot afford to pay the cost. The scheme is intended to supplement that of the convalescent arrangements of the hospitals and to deal with children who fall outside the scheme for recuperative convalescence which they provide.

This is a valuable ancillary provision and 7 children benefited by a period of convalescence under the scheme.

### SUMMARY OF WORK 1971

#### SCHOOL MEDICAL OFFICERS

Visits to Schools—2,619

								<i>No. of Children inspected or treated</i>
Routine Inspections	..	..	..	..	..	..	..	35,658
Special Inspections	..	..	..	..	..	..	..	23,130
Re-inspections	..	..	..	..	..	..	..	7,820

#### OPHTHALMIC CLINICS:

Number of spectacles prescribed by the ophthalmic surgeons .. .. 2,951

#### AURAL CLINIC:

Number examined by the aural surgeons .. .. 4,105  
 Number of mastoid dressings .. .. 567  
 Number of other aural treatments .. .. 2,275  
 Number of audiograms .. .. 5,397



AUDIOMETER SWEEP TESTS .. .. .	8,878
ORTHOPAEDIC CLINICS:	
Number examined by the orthopaedic surgeon .. .. .	161
Number treated by the physiotherapists .. .. .	1,446
CHILD GUIDANCE CLINICS .. .. .	865
SPEECH THERAPY CLINICS .. .. .	1,503
ULTRA-VIOLET RAY TREATMENT .. .. .	561
DENTAL CLINICS (completed courses of treatment) .. .. .	22,112
ORTHODONTIC CLINIC (completed courses of treatment) .. .. .	356
ASTHMA CLINIC .. .. .	1,181
SCHOOL NURSES AND/OR NURSING ASSISTANTS:	
Examinations of children for uncleanliness .. .. .	301,196
Vision tests .. .. .	76,612
Home visits .. .. .	6,339
CHIROPODY CLINIC .. .. .	640

### AUDIOMETRIC SURVEY 1971

The examination in the schools of the five year old children by pure tone audiometry was continued during the year. Any other children with suspected hearing loss could also be brought forward.

The methods and standards used were described in previous reports:-

Number of children tested .. .. .	8,878
Number of children failed .. .. .	1,132
Number of children failed and already under treatment:	
Aural clinic .. .. .	130
G.P. .. .. .	2
Hospital .. .. .	5
Number of children referred to:	
Aural clinic .. .. .	957
G.P. .. .. .	1
Failed but for retest in school .. .. .	37
Number of children failed to attend clinic for retest .. .. .	93
Number of failures who had pure tone tests at clinic .. .. .	514

Number of children failed pure tone test at clinic	..	..	..	463
--	----	----	----	-----

Failed test at clinic, referred to:

Aural surgeon	..	..	..	..	..	..	..	275
G.P.	..	..	..	..	..	..	..	6
Hospital	..	..	..	..	..	..	..	14
For retest at clinic	..	..	..	..	..	..	..	158

Number of children already under care of:

Aural surgeon	..	..	..	..	..	..	..	5
G.P.	..	..	..	..	..	..	..	2
Hospital	..	..	..	..	..	..	..	3

Number of children seen for first time or reviewed by aural surgeon:

School medical officer referral	..	..	..	..	..	..	1,612
Sweep test referral	..	..	..	..	..	..	2,493

Total number seen for the first time or reviewed by aural surgeon	..	4,105
---	----	-------

Number of children who did not attend to be seen by aural surgeon or review:

School medical officer referral	..	..	..	..	..	..	607
Sweep test referral	..	..	..	..	..	..	800
							1,407

Number of children referred for treatment:

*Sweep test failures*

Hospital	..	..	..	..	..	..	..	769
Decongestants and review	..	..	..	..	..	..	421	
No treatment advised and review	..	..	..	..	..	..	683	
Perceptive deafness and review	..	..	..	..	..	..	34	
Others	..	..	..	..	..	..	70	
Discharged	..	..	..	..	..	..	516	

### *School medical officer referrals*

Hospital .. .. .	556
Decongestants and review .. .. .	195
No treatment advised and review .. .. .	403
Perceptive deafness and review .. .. .	87
Others .. .. .	125
Discharged .. .. .	244
Parents refused operation .. .. .	2

### Total number of children referred for treatment:

Sweep test .. .. .	2,493
School medical officer .. .. .	1,612
	<hr/>
TOTAL: ..	4,105

### *Hospital referrals*

### *Sweep test failures*

### *S.M.O. referrals*

T & A .. .. .	206	136
Adenoidectomy .. .. .	248	148
Bi-lateral antrum washout .. .. .	48	39
Myringotomy .. .. .	64	41
Stopples .. .. .	148	129
Mastoidectomy .. .. .	36	34
Tympanoplasty .. .. .	19	29
	<hr/>	<hr/>
TOTAL .. .. .	769	556

Number of children referred for X-ray .. .. .	242
Number of children referred to other consultants .. .. .	74
Number of children referred for evoked response .. .. .	8
Number of children referred for blood count and sickle cell test .. .. .	42

**SUMMARY OF WORK CARRIED OUT AT THE  
AURAL CLINIC, CANTERBURY HOUSE,  
FOR THE YEAR 1971**

Number of children seen by aural surgeon	New Old Total:	1,108 2,997 4,105
Number of audiograms	New Old	2,290 3,107
Special tests	{ Speech Filter Impedence Total:	186 116 90 5,789
Number of mastoid dressings by aural nurse	Total:	567
Number of other aural treatments by aural nurse	Syringing Poltizerisation Proetz suction Total	2,248 16 11 2,275
Number of individual children seen by the aural nurse	New Old Total:	2,290 7,043 9,333
Total number of children attended clinic	New Old Total:	3,398 7,043 10,441

**SPEECH THERAPY**

Miss E. Sprayson, Chief Speech Therapist, reports as follows:-

**STATISTICS 1971**

Number of cases under treatment	..	..	..	..	..	..	1,174
Number of cases referred for treatment	..	..	..	..	..	..	869
Number of cases opened	..	..	..	..	..	..	688
Number of diagnostic interviews	..	..	..	..	..	..	140
Number who did not attend	..	..	..	..	..	..	120
Number of cases closed	..	..	..	..	..	..	543
Number of cases on the waiting list	..	..	..	..	..	..	162



## **George Road Centre**

It has been possible during the year to arrange for a therapist to be present every day of the week and there has not therefore been a long wait for either diagnostic interviews or treatment. Many children are now being referred for assessment with a view to obtaining information regarding their placement in an appropriate school. These assessments are carried out over a number of visits to the clinic and as other agencies (e.g. Child Guidance Clinic, Aural Clinic, etc.) are involved, it is usually some time before comprehensive reports are available.

## **Kings Heath Centre**

During the year there has been a marked increase in the number of children referred for speech therapy. A tendency has been noticed towards the referral of younger children under 6 years of age, which is extremely advantageous to the treatment of their speech and language problems. The help given by the Child Guidance staff is much appreciated.

## **Kingstanding Centre**

This clinic continues to function regularly for only two sessions per week and it is therefore necessary to give a third session from time to time in order to cope with the referrals. It has been very helpful to have a part-time member of staff working within schools in the area. The clinic, which is held at a Child Welfare Centre, is always very busy and when the staffing position improves it is hoped that further sessions can be arranged. The help of the health visitors is very much appreciated. They have considerable knowledge of the families and have always co-operated in every possible way.

## **Lozells Centre**

During the year 203 children were under regular treatment, and as the clinic was manned for 16 sessions per week until September 1971, the waiting list was kept to within manageable proportions.

Referrals continued to come from usual sources but there were a considerable number from parents, usually via the health visitor. They were mainly pre-school and whereas the referrals tended to be appropriate it must be stressed that it would have been helpful if they had first gone through the appropriate channels before reaching the Speech Therapy Clinic, e.g. Pre-School Aural Clinic, Consultant Plastic Surgeons, etc.

During the Easter holidays, it was decided that a group of pre-school children would attend each morning from 9.30 to 12.00 noon. The group then met weekly for a shorter period and this was found most useful for long term assessment of children.

Throughout the year, much help was received from Child Guidance Clinic staff.

## **Ward End Centre**

Rearrangement of clinical sessions has enabled us to open the clinic every day. The waiting list has been greatly reduced during this year and there has been an increase in the number of children seen for diagnostic interviews. Attendance has been good and co-operation from parents on the whole excellent. We are most grateful for help from Child Guidance staff, Peripatetic Teachers of the Deaf and Aural Clinic staff with many of our cases.

## **Child Welfare Centres**

All centres running a play and training group were visited during the year. Advice and suggestions were offered to the mothers and organisers.

Tower Hill and Erdington Clinics were visited in order to assess children referred by the clinic staff. This arrangement has proved to be most successful both for mothers and staff.

## **Speech Therapy Students**

Students from the Birmingham and Leicester Schools of Speech Therapy have visited Lozells, Kings Heath and George Road Clinics for clinical training. Students have also visited the Ward End Clinic for periods of observation. It is not possible to accept students for clinical practice at all our clinics as the facilities are not adequate, i.e., sufficient number of rooms.

## **Pre-School Aural Clinic**

Visits by senior staff have continued this year. There has been an increase in the number of children referred to the clinic for assessment of speech and language problems and many of these are in need of further investigation in speech clinics. The clinic continues to be an important source of referral of the pre-school child. We are grateful that special facilities are available in order that children with severe problems can be seen at an early age.

## **MEDICAL INSPECTION AND TREATMENT**

### **Return for the year ended 31st December, 1971**

Number of pupils on registers of maintained and assisted Primary and Secondary Schools (including Nursery and Special Schools) in January 1972 as in Forms 7, 7M and 11 Schools . . . . . 192,360

PART 1 – MEDICAL INSPECTION OF PUPILS ATTENDING  
MAINTAINED PRIMARY AND SECONDARY SCHOOLS  
(INCLUDING NURSERY AND SPECIAL SCHOOLS)

**TABLE A – PERIODIC MEDICAL INSPECTIONS**

Age Groups inspected (By year of Birth)	No. of pupils who have received a full medical examination	PHYSICAL CONDITION OF PUPILS INSPECTED		No. of pupils found not to warrant a medical examination	Pupils found to require treatment (excluding dental diseases and infestation with vermin)		
		Satisfactory	Unsatisfactory		for defective vision (excluding squint)	for any other condition recorded at Part II	Total individual pupils
		No.	No.				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1967 and later	1,862	1,840	22	No selective medical examinations were carried out in 1971.	32	520	507
1966	6,377	6,305	72		188	1,827	1,783
1965	7,407	7,341	66		320	2,100	2,186
1964	3,428	3,393	35		141	1,080	1,063
1963	996	974	22		62	468	451
1962	602	577	25		69	311	299
1961	614	600	14		67	308	278
1960	1,235	1,222	13		105	456	474
1959	650	643	7		62	247	243
1958	183	177	6		34	102	94
1957	2,333	2,323	10		245	455	608
1956 and earlier	9,971	9,896	75		1,262	2,010	2,922
TOTAL	35,658	35,291	367		2,587	9,884	10,908

Column (3) total as a percentage of Column (2) total .. .. . 98.97%

Column (4) total as a percentage of Column (2) total .. .. . 1.03%

**TABLE B – OTHER INSPECTIONS**

Number of special Inspections	..	..	..	..	..	..	23,130
Number of Re-inspections..	..	..	..	..	..	..	7,820
TOTAL	..	..	..	..	..	..	30,950

TABLE C - INFESTATION WITH VERMIN

- (a) Total number of individual examinations of pupils in schools by school nurses or other authorised persons . . . . . 301,196
- (b) Total number of individual pupils found to be infested . . . . . 13,608
- (c) Number of individual pupils in respect of whom cleansing notices were issued (Section 54(2), Education Act, 1944) . . . . . 1,462
- (d) Number of individual pupils in respect of whom cleansing orders were issued (Section 54(3), Education Act, 1944) . . . . . 1,250

PART II - DEFECTS FOUND BY PERIODIC AND SPECIAL  
MEDICAL INSPECTIONS DURING THE YEAR

Defect Code No. (1)	Defect or Disease (2)		Periodic Inspections				Special Inspection
			Entrants	Leavers	Others	Total	
4	Skin . . . . .	T	747	647	303	1,697	3,939
		O	243	100	96	439	193
5	Eyes: a. Vision . . . . .	T	681	1,507	399	2,587	809
		O	342	278	167	787	118
	b. Squint . . . . .	T	664	78	170	912	227
		O	243	15	56	314	51
	c. Other . . . . .	T	92	35	59	186	320
		O	47	30	38	115	28
6	Ears: a. Hearing . . . . .	T	543	86	176	805	368
		O	327	67	99	493	42
	b. Otitis Media . . . . .	T	138	29	54	221	106
		O	71	12	19	102	6
	c. Other . . . . .	T	71	35	28	134	122
		O	84	18	14	116	19
7	Nose and Throat . . . . .	T	685	149	215	1,049	375
		O	769	91	166	1,026	59
8	Speech . . . . .	T	288	33	133	454	207
		O	331	34	126	491	40
9	Lymphatic Glands . . . . .	T	20	2	3	25	28
		O	265	27	91	383	18
10	Heart . . . . .	T	55	22	33	110	38
		O	143	73	86	302	21
11	Lungs . . . . .	T	480	162	188	830	445
		O	265	108	84	457	58



PART II - DEFECTS (continued)

Defect Code No. (1)	Defect or Disease (2)		Periodic Inspections				Special Inspection
			Entrants	Leavers	Others	Total	
12	Developmental:	T	113	17	13	143	20
	a. Hernia .. ..	O	108	8	26	142	3
	b. Other .. ..	T	258	182	154	594	319
		O	379	141	104	624	27
13	Orthopaedic:	T	63	73	68	204	122
	a. Posture .. ..	O	132	142	102	376	49
	b. Feet .. ..	T	353	116	125	594	491
		O	283	81	107	471	98
	c. Other .. ..	T	225	129	182	536	450
		O	277	98	124	499	31
14	Nervous System:	T	45	24	49	118	58
	a. Epilepsy .. ..	O	31	9	19	59	4
	b. Other .. ..	T	88	54	135	277	93
		O	103	37	64	204	15
15	Psychological:	T	79	62	95	236	279
	a. Development ..	O	228	67	201	496	29
	b. Stability .. ..	T	166	61	142	369	497
		O	636	126	244	1,006	69
16	Abdomen .. ..	T	116	85	35	236	134
		O	112	54	39	205	31
17	Other .. ..	T	332	255	221	808	1,337
		O	268	170	133	571	242

T = Number of pupils found to require treatment

O = Number of pupils found to require observation

PART III – TREATMENT OF PUPILS ATTENDING MAINTAINED  
PRIMARY AND SECONDARY SCHOOLS  
(INCLUDING NURSERY AND SPECIAL SCHOOLS)

TABLE A – EYE DISEASES, DEFECTIVE VISION AND SQUINT

						<i>Number of cases known to have been dealt with</i>
External and other, excluding errors of refraction and squint .. .. .	..	..				783
Errors of refraction (including squint) .. .. .	..	..	..	..	..	4,766
					TOTAL .. .. .	5,549
Number of pupils for whom spectacles were prescribed .. .. .	..	..				10,469

TABLE B – DISEASES AND DEFECTS OF EAR, NOSE AND THROAT

						<i>Number of cases known to have been dealt with</i>
Received operative treatment:–						
(a) for diseases of the ear .. .. .	..	..	..	..	..	860
(b) for adenoids and chronic tonsillitis .. .. .	..	..	..	..	..	1,583
(c) for other nose and throat conditions .. .. .	..	..	..	..	..	342
Received other forms of treatment .. .. .	..	..	..	..	..	3,550
					TOTAL .. .. .	6,335
Total number of pupils still on the register of schools at 31st December 1971 known to have been provided with hearing aids:–						
(a) during the calendar year 1971 .. .. .	..	..	..	..	..	72
(b) in previous years .. .. .	..	..	..	..	..	397

TABLE C – ORTHOPAEDIC AND POSTURAL DEFECTS

						<i>Number known to have been treated</i>
(a) Pupils treated at clinics or out-patients departments .. .. .	..	..				2,672
(b) Pupils treated at school for postural defects .. .. .	..	..	..	..	..	493
					TOTAL .. .. .	3,165

TABLE D - DISEASES OF THE SKIN  
(Excluding uncleanliness, for which see Table C of Part I)

									<i>Number of pupils known to have been treated</i>
Ringworm - (a)	Scalp	..	..	..	..	..	..	..	133
	(b) Body	..	..	..	..	..	..	..	87
Scabies	..	..	..	..	..	..	..	..	3,162
Impetigo	..	..	..	..	..	..	..	..	705
Other skin diseases	..	..	..	..	..	..	..	..	5,747
TOTAL									9,834

TABLE E - CHILD GUIDANCE TREATMENT

						<i>Number known to have been treated</i>
Pupils treated at Child Guidance clinics	..	..	..	..	..	865

TABLE F - SPEECH THERAPY

						<i>Number known to have been treated</i>
Pupils treated by speech therapists	..	..	..	..	..	1,503

TABLE G - OTHER TREATMENT GIVEN

								<i>Number known to have been treated</i>
(a)	Pupils with minor ailments	..	..	..	..	..	..	11,036
(b)	Pupils who received convalescent treatment under School Health Service arrangements	..	..	..	..	..	..	7
(c)	Pupils who received B.C.G. vaccination	..	..	..	..	..	..	10,133
(d)	Other than (a), (b) and (c) above:							
	Asthma	..	..	..	..	..	..	1,181
	U.V.R.	..	..	..	..	..	..	561
	Chiropody	..	..	..	..	..	..	640
TOTALS (a)-(d)								23,558

## **Screening Tests of Vision and Hearing**

Vision testing is carried out as a routine by school nurses and children are tested during their first year at school and at the ages of 7, 9, 11, 13 and 15.

Colour vision testing of both boys and girls at the age of 10 is carried out by school medical officers.

Specialist aural nurses and nursing assistants undertake the routine audiometric testing of school entrants during their first year at school. This is followed where necessary by further investigation and treatment at the Aural Clinic.



# HANDICAPPED PUPILS

## MEDICAL SUPERVISION OF SPECIAL SCHOOLS

The system of medical inspection carried out in all schools of the City is of course extended to the special schools. A child assessed as being in need of a special school education has already been examined to assess the degree of handicap but it is all the more important to keep such children under constant review. Only thus can progress be noted and any developments dealt with. The medical officers responsible for ascertainment are also those who undertake the periodic medical inspections. By this means the same doctor has an opportunity to keep in touch with the children he or she already knows and takes a personal interest in their welfare.

### BIRMINGHAM CHILDREN ON REGISTERS OF SPECIAL SCHOOLS MAINTAINED BY THE AUTHORITY AS AT DECEMBER, 1971

#### Educationally Sub-normal Children

Residential	..	..	..	..	..	..	..	..	..	187
Day	..	..	..	..	..	..	..	..	..	1,803

#### Maladjusted Children

Residential	..	..	..	..	..	..	..	..	..	77
Day	..	..	..	..	..	..	..	..	..	47

#### Deaf and Partially Hearing Children

Day	..	..	..	..	..	..	..	..	..	144
-----	----	----	----	----	----	----	----	----	----	-----

#### Partially Sighted Children

Day	..	..	..	..	..	..	..	..	..	118
-----	----	----	----	----	----	----	----	----	----	-----

#### Delicate Children

Residential	..	..	..	..	..	..	..	..	..	213
Day	..	..	..	..	..	..	..	..	..	158

#### Physically Handicapped Children

Residential	..	..	..	..	..	..	..	..	..	33
Day	..	..	..	..	..	..	..	..	..	209

Hospital Schools	..	..	..	..	..	..	..	..	..	131
------------------	----	----	----	----	----	----	----	----	----	-----

Handicapped Pupils (Maladjusted) Boarded in Hostels Maintained by the Education Committee	..	..	..	..	..	..	..	..	..	10
---	----	----	----	----	----	----	----	----	----	----

# **EXTRA DISTRICT CHILDREN ATTENDING BIRMINGHAM SPECIAL SCHOOLS AS AT DECEMBER, 1971**

Educationally sub-normal children .. .. .	12
Deaf and partially hearing children .. .. .	107
Partially sighted children .. .. .	57
Delicate children .. .. .	7
Physically handicapped children .. .. .	106
Children at hospital special schools .. .. .	64
Maladjusted children .. .. .	3

## **RESULTS OF SPECIAL EXAMINATIONS 1971**

Results of examinations of children during the year with a view to their receiving or continuing to receive special educational treatment.

Number of children seen .. .. .	1,219
Recommended for day (E.S.N.) school .. .. .	259
Recommended for residential (E.S.N.) school .. .. .	50
Recommended for residential open-air school .. .. .	71
Recommended for day open-air school .. .. .	73
Recommended for residential (P.H.) school .. .. .	9
Recommended for day (P.H.) school .. .. .	22
Recommended for residential school for epileptics .. .. .	4
No action .. .. .	36
To stay in special school .. .. .	51
For trial in ordinary school .. .. .	48
To stay in ordinary school .. .. .	51
To leave special (E.S.N.) schools in order to take up employment .. .. .	16
To leave open-air schools to take up employment .. .. .	1
Decision deferred .. .. .	137
To be excluded from school temporarily .. .. .	nil
Educationally sub-normal needing special provision .. .. .	64
Recommended for home teaching .. .. .	215
Recommended for Carlson House School for Spastics .. .. .	7
Recommended for maladjusted schools .. .. .	62

# ASCERTAINMENT AND PLACINGS OF HANDICAPPED CHILDREN 1971

	(1) <i>Blind</i> (2) <i>Partially Sighted</i>		(3) <i>Deaf</i> (4) <i>Partially Hearing</i>		(5) <i>Physically Handicapped</i> (6) <i>Delicate</i>		(7) <i>Maladjusted</i> (8) <i>Educationally Sub-Normal</i>		(9) <i>Epi- leptic</i>	(10) <i>Speech Defects</i>	(11) <i>Total</i>
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
A. Handicapped pupils newly placed in special schools or boarding homes	2	25	4	36	48	94	57	336	3	6	611
B. Handicapped pupils newly ascertained as needing education at special schools or in boarding homes	4	19	4	50	55	213	77	364	3	8	797

## BIRMINGHAM CHILDREN IN SPECIAL SCHOOLS NOT MAINTAINED BY THE EDUCATION COMMITTEE AS AT 1st DECEMBER, 1971

Blind and partially sighted pupils	..	..	..	..	..	..	..	..	..	31
Deaf and partially hearing pupils	..	..	..	..	..	..	..	..	..	40
Epileptic pupils . . . . .	..	..	..	..	..	..	..	..	..	17
Physically handicapped pupils	..	..	..	..	..	..	..	..	..	25
Spastic pupils . . . . .	..	..	..	..	..	..	..	..	..	44
Educationally sub-normal pupils	..	..	..	..	..	..	..	..	..	30
Pupils with speech defects	..	..	..	..	..	..	..	..	..	1
Delicate pupils . . . . .	..	..	..	..	..	..	..	..	..	1
Maladjusted pupils	..	..	..	..	..	..	..	..	..	24

## SCHOOLS FOR THE PARTIALLY SIGHTED

Mr. Mark Tree reports:-

“The increasing demand for admission to our two schools continues so that extension of the accommodation is being put in hand. We now have a total of 176 pupils consisting of 117 boys and 59 girls.

I am glad to record the continuing happy and helpful co-operation between the heads of the two schools, Miss Cox and Mr. Challacombe and myself, so that the selection of children suitable for admission, and the review of their progress is our joint concern.

I am also indebted to them for the following statistical details:-

New admissions during the year	..	..	..	..	..	22 pupils
Transfer between the schools	..	..	..	..	..	1 „
Left school to commence work	..	..	..	..	..	12 „
Transfer to normal schools	..	..	..	..	..	11 „
Transfer to residential schools	..	..	..	..	..	8 „

## SPECIAL SERVICES AFTER-CARE SECTION

The After-Care Section is responsible for the visitation of leavers from all types of special schools until the age of 18, and in addition holds itself ready to accept referrals of other handicapped people from outside agencies. Assistance is also given to former pupils who not infrequently approach the department with their family problems in later life.

The fundamental purpose of after-care is to help the handicapped person to find his place in the community, and to utilise his ability to the fullest extent. Wherever possible he is encouraged to take up employment and thus to gain a substantial measure of personal independence.

The period under review has been one of extreme difficulty in the field of employment, and despite much effort by the After-Care staff it has not been possible to keep all the potentially employable cases in work. For people on the border-line of employability increasing use is being made of the training centres and sheltered workshops administered by various agencies in the City, to whom the After-Care staff is deeply indebted for their co-operation. The need for more vacancies in day training establishments is growing rapidly in step with changing conditions in industry, which are tending to offer fewer opportunities for the handicapped.

For those who are so severely disabled as to be house-bound efforts are made to find recreational facilities which will give the disabled person some contact with the outside world.

In many cases it is the family which needs assistance to an even greater extent than the handicapped person himself. It is the aim of the After-Care Visitor in each case to give support to the household which he visits of a kind commensurate with the care which was afforded to the family and to the young person himself by the school in his earlier years. For this purpose time and understanding are found to be at least as important as material assistance. In this connection tribute is due to the small staff of After-Care Visitors for the very considerable personal effort which they make at all times of the day and evening to this end.

## 1971 School Leavers under Supervision

Left schools for the educationally subnormal:

Boys	..	..	..	..	..	..	..	..	..	125
Girls	..	..	..	..	..	..	..	..	..	74



Left schools for other handicaps:									
Boys	..	..	..	..	..	..	..	..	57
Girls	..	..	..	..	..	..	..	..	36
Had home teaching:									
Boys	..	..	..	..	..	..	..	..	9
Girls	..	..	..	..	..	..	..	..	19
Left ordinary school:									
Boys	..	..	..	..	..	..	..	..	12
Girls	..	..	..	..	..	..	..	..	3
									335
Pre 1971 school-leavers continuing under supervision:									
Left schools for the educationally subnormal:									
Boys	..	..	..	..	..	..	..	..	247
Girls	..	..	..	..	..	..	..	..	182
Left schools for other handicaps:									
Boys	..	..	..	..	..	..	..	..	120
Girls	..	..	..	..	..	..	..	..	67
Had home teaching:									
Boys	..	..	..	..	..	..	..	..	2
Girls	..	..	..	..	..	..	..	..	35
Left ordinary school:									
Boys	..	..	..	..	..	..	..	..	9
Girls	..	..	..	..	..	..	..	..	12
									774

## CAREERS ADVICE AND EMPLOYMENT OF HANDICAPPED YOUNG PEOPLE

Mr. H. Heginbotham, Principal Careers Officer, reports:-

"During the year, Careers Advisers gave first interviews to 397 handicapped young people in the Authority's schools and in independent institutions in order to advise them on further education, training, and choice of employment. The total includes extra-district children who were interviewed by Careers Advisers while attending schools maintained by the Education Committee and whose records were subsequently transferred to their home areas. First interviews reflect only a small part of careers work with handicapped school leavers as many young people have contact with the Youth Employment Service over a period of time. This year the number of handicapped young people at local colleges of further education are included. The increase in the numbers seen at hospital schools reflects the work which is now being undertaken at the Hollymoor Adolescent Unit, which is part of the Woodlands Hospital School.

It is pleasing to be able to report the successful outcome of a careers plan begun in May 1969. A year before she was due to leave school, a spastic girl confined to a wheelchair was interviewed by a careers adviser who recommended that she should attend a Spastic Society Assessment Course. Following the course she applied to and was accepted at the Society's Lancaster Training Centre for training in office work. In July 1971, as she neared the end of her course, help was requested in finding her suitable employment. After 52 firms had been approached by the Service, she was eventually offered a job in September 1971 as an accounting machine operator. This girl's experience illustrates the time and effort often required to help just one person to enter into open employment and become self-supporting.

However, success is not always attainable. For instance, a young immigrant had an industrial accident resulting in the loss of several fingers. He was eventually referred to a careers adviser by a hospital medical social worker, who felt that his working capacity should be re-assessed in order to determine the most suitable occupation for him. After interview, an application was made for a course of Industrial Rehabilitation. Following the satisfactory completion of the course, it was the recommendation of the case conference that he could undertake any factory process work. The careers adviser contacted a sympathetic employer who interviewed the young man and offered him a job which was well within his capability. The young man refused to accept the employment offered. Shortly afterwards, he passed out of the scope of the Service.

It is often difficult to find appropriate training facilities for those partially sighted school leavers who are thought to be in need of further training. For instance, a girl who was blind in one eye and had poor vision in the other was also handicapped by partial hearing and spastic left hemiplegia. The careers adviser felt that she would benefit from a period of further training at Queen Alexandra College for the Blind. However, she was not accepted at the College as she could not be classified as blind. She was therefore referred to the Spastics' Society and following attendance at an assessment course is awaiting entry to the Lancaster Centre for a clerical course.

There have been new developments this year in the further education of handicapped school leavers. A national college for the handicapped, Hereward College, has opened at Coventry and offers courses for students of 'O' and 'A' level potential. In Birmingham some deaf school leavers have commenced a full-time course leading to 'O' level at a college of further education. An educationally subnormal school leaver has gone to Dilton Hall, a centre run by the National Society for Mentally Handicapped Children, for a social adjustment course.

There still remains the problem of those educationally subnormal school leavers who are not ready for open employment or who fail to hold a job satisfactorily. These young people are badly hit when the employment situation deteriorates. Where possible, attempts are made to find them places in either the Birmingham Industrial Therapy Association workshops, Monymhull Day Centre or Adult Training Centres, but waiting lists exist. The urgent need for additional places in Adult Training Centres continues.

Careers Advisers are assisted in their difficult and sometimes frustrating task by the very great help which they are most readily given by many individuals and organisations, in particular the School Health Service and the staff of Special Schools. This co-operation is greatly appreciated and is of vital importance in the vocational guidance and placement of handicapped young people".

TABLE I  
NUMBER OF FIRST INTERVIEWS DURING THE YEAR  
1st January, 1971 to 31st December, 1971  
(1970 figures in brackets)

	Boys	Girls	Total
Birmingham Special Schools:-			
E.S.N. . . . .	99 (91)	75 (77)	174 (168)
Physically Handicapped . . . .	15 (11)	7 (11)	22 (22)
Deaf . . . . .	23 (16)	23 (11)	46 (27)
Partially Sighted . . . . .	7 (4)	12 (6)	19 (10)
Delicate . . . . .	16 (9)	11 (2)	27 (11)
Maladjusted . . . . .	9 (8)	2 (4)	11 (12)
Hospital . . . . .	12 (—)	8 (—)	20 (—)
Home Teaching . . . . .	6 (5)	8 (5)	14 (10)
Special Units in Ordinary Schools	10 (6)	1 (2)	11 (8)
Handicapped children in ordinary schools . . . . .	16	11	27
Handicapped young people in Colleges of Further Education . .	2 } (10)*	6 } (7)*	8 } (17)*
Other Special Schools . . . .	13 (8)	5 (8)	18 (16)
TOTAL . . . .	228 (168)	169 (133)	397 (301)

\*Handicapped young people in Colleges of Further Education were not counted separately in 1970.

TABLE II  
HANDICAPPED YOUNG PEOPLE IN SECONDARY SCHOOLS  
AND COLLEGES OF FURTHER EDUCATION

	Boys	Girls	Total
Amputation of one leg . . . . .	1	1	2
Disease of the heart . . . . .	—	1	1
Ear defects . . . . .	1	1	2
Eye defects . . . . .	4	—	4
Diseases, injuries, deformities of:			
Upper limb . . . . .	3	2	5
Lower limb . . . . .	5	3	8
Maladjustment . . . . .	4	1	5
Mental subnormality . . . . .	—	2	2
Dyslexia . . . . .	—	3	3
Diabetes . . . . .	—	3	3
	18	17	35

TABLE III  
ANALYSIS OF REGISTER OF DISABLED PERSONS  
(1970 figures in brackets)

<i>Disability</i>	<i>Boys</i>		<i>Girls</i>		<i>Grand Total</i>	
Amputation:-						
One arm (including partial) ..	—	(1)	1	(1)	1	(2)
One leg .. .. .	2	(2)	1	(—)	3	(2)
Arthritis and Rheumatism .. ..	—	(—)	—	(1)	—	(1)
Diseases of the Digestive System ..	—	(—)	—	(1)	—	(1)
Diseases of the Heart and Circulatory System .. .. .	1	(—)	—	(4)	1	(4)
Bronchitis, Asthma, etc... ..	3	(7)	3	(—)	6	(7)
Diseases of the Skin .. .. .	1	(1)	—	(—)	1	(1)
Ear Defects:-						
Deaf without speech .. ..	5	(5)	1	(—)	6	(5)
Deaf with speech .. .. .	8	(5)	7	(4)	15	(9)
Hard of hearing .. .. .	3	(2)	1	(2)	4	(4)
Eye Defects .. .. .	5	(6)	2	(1)	7	(7)
Injuries to head, face, neck, throat ..	1	(1)	1	(1)	2	(2)
Diseases, Injuries, Deformities of:-						
Upper limb .. .. .	6	(1)	2	(1)	8	(2)
Lower limb .. .. .	7	(4)	6	(5)	13	(9)
Paralysis of lower portion of body	1	(1)	1	(3)	2	(4)
Other Spinal Diseases and Injuries ..	5	(1)	3	(3)	8	(4)
Mental Disorders:-						
Anxiety States—Hysteria .. ..	—	(1)	—	(—)	—	(1)
Mental subnormality .. .. .	7	(3)	2	(1)	9	(4)
Epilepsy .. .. .	9	(9)	5	(6)	14	(15)
Other organic nervous diseases ..	4	(4)	4	(3)	8	(7)
Other general diseases not mentioned above, e.g., leukaemia, anaemia, etc. .. .. .	3	(1)	4	(3)	7	(4)
Obesity, Diabetes, etc. .. .. .	1	(1)	—	(1)	1	(2)
TOTALS .. .. .	72	(56)	44	(41)	116	(97)



## **SPEECH THERAPY IN SPECIAL SCHOOLS**

The following schools have been visited during the year:-

### **Schools for Physically Handicapped Children**

The Victoria

The Wilson Stuart

### **Schools for Delicate Children**

Haseley Hall

The Shenstone

The Pines

Uffculme

### **Schools for Partially Sighted Children**

The George Auden

### **Schools for Educationally Sub-Normal Children**

The Amblecote

The Hamilton

Astley Hall

Kingstanding

The Calthorpe

The Mayfield

The Collingwood

The Dame Ellen Pinsent

Erdington

The Queensbury

Fox Hollies

Stechford

Hallmoor Primary

St. Francis

### **School for Children with a Variety of Handicaps**

Springfield House

### **Schools for Maladjusted Children**

The Underwood

### **No. of Children seen in Special Schools- 329**

Children seen in schools have speech, voice and language disorders, the under-lying aetiology varying from case to case. These children have been seen regularly by the therapist for individual help and with the day to day reinforcement by the class teachers, progress has been accelerated. A programme was initiated by the Head Teacher of Mayfield School involving complete classes. The pupils benefited from social language training, voice and articulation work which was carried out by the teacher and supplemented by the therapist.

It has not been possible to visit all the Training Centres since their amalgamation with Special Schools. Visits have been made to Erdington, Fox Hollies, Kingstanding, New Town and Stechford. At the New Town Annexe the therapist was involved in the assessment of some children and advice was given on the handling of their particular problems.

## Uffculme School Language Unit

The Language Unit caters for children with specific language difficulties and the staff of the Unit and Speech Therapist have worked in close co-operation in planning and carrying out language programmes. Most of the children have made good progress through the year and some have improved sufficiently to begin to be integrated into other classes in the school.

### HOME TEACHING SERVICE

Tuition under the home teaching service was provided for 288 children.

Accidents, fractures, etc.	..	..	..	..	..	..	..	36
Asthma ..	..	..	..	..	..	..	..	3
Cerebral palsy ..	..	..	..	..	..	..	..	5
Congenital heart conditions	..	..	..	..	..	..	..	4
Delicate ..	..	..	..	..	..	..	..	10
Dystrophy ..	..	..	..	..	..	..	..	5
Educationally subnormal	..	..	..	..	..	..	..	24
Epilepsy ..	..	..	..	..	..	..	..	7
Haemophilia ..	..	..	..	..	..	..	..	1
Kidney conditions	..	..	..	..	..	..	..	5
Leukaemia ..	..	..	..	..	..	..	..	1
Nervous disorders, emotional disturbances	..	..	..	..	..	..	..	71
Orthopaedic conditions	..	..	..	..	..	..	..	25
Partially hearing	..	..	..	..	..	..	..	1
Partially sighted	..	..	..	..	..	..	..	2
Pregnant ..	..	..	..	..	..	..	..	22
Rheumatoid arthritis	..	..	..	..	..	..	..	6
Severely subnormal	..	..	..	..	..	..	..	32
Skin conditions	..	..	..	..	..	..	..	1
Spina bifida ..	..	..	..	..	..	..	..	3
Tuberculosis ..	..	..	..	..	..	..	..	4
Tumors ..	..	..	..	..	..	..	..	1
Other conditions	..	..	..	..	..	..	..	19

---

288

---

### CHILD GUIDANCE SERVICE

Mr. W. J. Bannon, Chief Psychologist reports:-

"The establishment of a Joint Psychological Service providing for all children from birth to school leaving age has been the major development of the year under review. Psychological work with children previously undertaken separately in the departments of Education, Public Health and Social Services is now the responsibility of one Psychological Service administered by the Education Department with a staff of nineteen psychologists.

Major commitments added to the previous functions of psychologists in the Child Guidance and School Psychological Services include those consequent on the Education (Handicapped Children) Act 1970 in relation to the late Training Centres, observation and assessment of all children with whom Social Services are involved, including work previously undertaken in Classifying Centres by Home Office Psychologists, and the development of an assessment and advisory psychological service in Child Health Service Clinics, Health Centres, Day Nurseries and Nursery Schools.

Recruitment of staff for these developments has been beyond expectations and it is expected that 15 or 16 psychologists will be in post by mid 1972. Restructure and establishment, the seconding of psychologist graduates from City schools for professional training and co-operation with the University in providing practical training facilities and seconding staff to assist in training have contributed to this situation.

Restructure and enlargement of the Remedial Teaching Service and decentralisation into four areas had made the operation of this service more effective and more closely related to the areas of operation. The number of in-service courses for teachers in this field will be considerably increased by this change.

A number of the remedial teaching staff have been actively engaged in an experimental project in screening and the provision of S.E.T. in infant schools which could well have a significant bearing on the education of the slow learning child in the future.

The changes initiated during the year have not affected, and should not materially affect, clinic statistics. Most of the extended commitments will be in allied fields, weighted on the side of prevention rather than treatment, and functioning through teachers, social workers, health visitors, medical officers and family doctors.

Dr. Reiner retired on December 31st after more than 25 years service as a psychologist in St. Francis (E.S.N.) School and in the Child Guidance Service. She will continue to work sessionally in the pre-school assessment clinics, a work in which she has specialised for some time".

#### 1971

The year's figures are as follows:-

On waiting list at 31.12.70	..	..	..	..	..	..	..	158
Cases referred during 1971	..	..	..	..	..	..	..	1,138
								<hr/> 1,296 <hr/>

#### *Sources of Referral:*

Parents	..	..	..	..	..	..	..	132
School Medical Officers	..	..	..	..	..	..	..	207
General Practitioners	..	..	..	..	..	..	..	38
Hospitals	..	..	..	..	..	..	..	6
Head Teachers	..	..	..	..	..	..	..	462
Probation Officers	..	..	..	..	..	..	..	12
Other Agencies	..	..	..	..	..	..	..	281
								<hr/> 1,138 <hr/>

*Reasons for Referral:*

Behaviour problems	..	..	..	..	..	..	..	682
Nervous symptoms	..	..	..	..	..	..	..	108
Habit disorders	..	..	..	..	..	..	..	26
Educational problems	..	..	..	..	..	..	..	214
Multiple problems	..	..	..	..	..	..	..	108
								<hr/> 1,138 <hr/>

*Seen:*

New cases treated	..	..	..	..	..	..	..	865
-------------------	----	----	----	----	----	----	----	-----

*Not Seen:*

Failed to attend	..	..	..	..	..	..	..	192
On waiting list at 31.12.71	..	..	..	..	..	..	..	239
								<hr/> 431 <hr/>

*Cases closed during year:*

After diagnosis and advice	..	..	..	..	..	..	..	176
Improved	..	..	..	..	..	..	..	352
Placed away from home	..	..	..	..	..	..	..	23
Did not materialise	..	..	..	..	..	..	..	192
Other reasons	..	..	..	..	..	..	..	204
								<hr/> 947 <hr/>

## SPECIAL EDUCATIONAL TREATMENT ASSESSMENTS

*Primary and Secondary Schools (437)*

(Partially hearing pupils 24)

Assessed as E.S.N. (32%)	..	..	..	..	..	..	..	177
Not E.S.N. (68%)	..	..	..	..	..	..	..	260
								<hr/> 437 <hr/>



*In Special Schools and Special Schools Clinic (245)*

Tests of partially hearing children	..	..	..	..	..	1
Tests of partially sighted children	..	..	..	..	..	3
Tests in special schools and special schools clinic other than above	..					241
						<hr/> 245 <hr/>

*Remedial Teaching Service*

Number of primary and secondary schools which have received the service during 1971	..	..	..	..	..	..	47
---	----	----	----	----	----	----	----

# SCHOOL BUILDINGS AND SCHOOL MEALS

## SCHOOL BUILDINGS

The construction of new schools and other educational buildings in accordance with the Education Committee's Building Programme has continued and during the year one new nursery school, nine primary schools, one comprehensive school and two youth centres were completed.

At 31st December, 1971 there were a further twelve new primary schools, two new secondary schools, two new youth centres and two further education establishments under construction.

During the year alterations, extensions and improvements providing accommodation were completed at fifteen schools. All of these projects were at primary and secondary schools. This number included adaptations to four primary schools to provide nursery accommodation.

## SCHOOL MEALS SERVICE

### DINNERS SUPPLIED TO CHILDREN JANUARY-DECEMBER, 1971

	<i>Free</i>	<i>Paid</i>	<i>Total</i>
Nursery .. .. .	33,947	176,572	210,519
Nursery Classes .. .. .	28,251	132,459	160,710
Primary .. .. .	2,503,292	8,234,582	10,737,874
Secondary Modern .. .. .	648,634	1,568,488	2,217,122
Comprehensive .. .. .	246,144	913,761	1,159,905
Bi-lateral .. .. .	68,526	296,790	365,316
Grammar and Technical .. .. .	106,344	1,579,553	1,685,897
Special .. .. .	96,143	314,002	410,145
	<hr/> 3,731,281 <hr/>	<hr/> 13,216,207 <hr/>	<hr/> 16,947,488 <hr/>

### DAILY NUMBER OF CHILDREN HAVING DINNERS 1971

	<i>Secondary</i>	<i>Primary (including Special Schools)</i>
January .. .. .	34,012	65,004
February .. .. .	32,992	63,315
March .. .. .	32,228	65,410
April .. .. .	23,964	60,072
May .. .. .	23,535	58,484
June .. .. .	22,161	57,653
July .. .. .	21,507	56,911
September .. .. .	33,479	56,810
October .. .. .	33,522	60,380
November .. .. .	33,699	60,732
December .. .. .	33,500	60,950

Daily number of meals served on a given day during holidays compared to the number served on a day during term.

				<i>In term</i>	<i>In holiday</i>	<i>Percentage</i>	
Easter	..	..	..	95,919	659	.68%	
Spring	..	..	..	80,845	582	.71%	
August	..	..	..	78,939	507	.64%	
Christmas	..	..	..	95,312	574	.60%	
Number of children eligible for free meals December, 1971				..	..	..	27,217
Number of children taking dinners on a given day September, 1971				..	..	..	93,277

#### NUMBER OF MEALS

<i>Paid</i>	<i>Free</i>	<i>Total</i>	<i>% of all children</i>
70,994	22,283	93,277	53.35%

#### MILK IN SCHOOLS SCHEME (Primary Schools only)

Number of children taking milk on a given day in September, 1971 (Statistics as supplied to the Department of Education and Science).

No. of children entitled to free milk on grounds of age	..	..	43,577
Percentage to number of children present	..	..	94.68%
No. of children entitled to free milk on health grounds	..	..	5,433

# ADULT EXAMINATION

## Examination of Teachers and Entrants to Colleges of Education

School medical officers have examined the candidates for admission to colleges of education and intending teachers, other than those who were examined on the completion of the approved course of training before entering the teaching profession.

21 medical examinations were carried out for other authorities whilst 3 intending teachers for Birmingham were examined in their own areas so that unnecessary travelling might be avoided. During the year 9 candidates were referred either for a specialist opinion and recommendation or for a report from the general practitioner. Before a candidate was referred to a specialist a discussion was held with the practitioner.

The following table shows the number of candidates examined:

	1967	1968	1969	1970	1971
College of Education Students ..	838	993	1,167	1,334	1,314
Intending Teachers .. ..	602	328	333	160	210
College of Art Students .. ..	17	44	35	62	84
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
	1,457	1,365	1,535	1,556	1,608
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>

## Examination of Manual and Non-manual Staff

The number of Manual and Non-manual Staff (excluding Teachers) examined during the year was:- .. .. . 1,346



# MISCELLANEOUS

## COUNTRY STUDY CENTRES AND OGWEN COTTAGE OUTDOOR PURSUITS CENTRE

The Authority maintains three residential Country Study Centres and Ogwen Cottage Outdoor Pursuits Centre, all situated outside the Birmingham area. The centres cater for parties of Birmingham pupils of secondary school age. The following table gives the numbers of parties and pupils visiting the centres during the past 12 months.

		<i>Bell Heath</i>	<i>Bockleton</i>	<i>Stansfeld</i>	<i>Ogwen</i>
Number of parties ..	..	28	41	22	19
Number of pupil days ..	..	6,635	8,268	4,714	5,878

### Health

Before each school party visits one of the Country Study Centres every pupil is required to undergo a medical examination. The School Health Service is advised of the school and the number of pupils attending the Centre. A nurse from one of the City's school clinics visits the school a day or so before the party departs to check that each child is free from infection. If necessary, a second visit is made if any pupil has been required to have special treatment.

Pupils visiting Ogwen Cottage are required to have a more rigorous examination. The pupils are requested to visit the clinics and the medicals are carried out by the doctors in charge. No pupil is permitted to go on one of the Outdoor Pursuits Courses without a medical examination.

Notwithstanding these precautions there are of course minor illnesses and accidents at the residential centres which are dealt with by the Matron who arranges for treatment by the local doctor or hospital.

Parents of a child who is sick are always informed of any illness or accident as also is the head teacher of the pupil's school. If a pupil is required to stay in hospital overnight daily visits to the pupil are made by the Matron or Teacher in Charge.

### Activities

#### **Bell Heath Country Study Centre, Quantry Lane, Nr. Belbroughton**

During the year this Centre has accommodated secondary school girls for the first time and it is hoped that after certain improvements and alterations have been made to the buildings that the girls' course will alternate with the boys' course.

Mixed parties for primary schools have, as in the past, visited Bell Heath for a short stay and these very young pupils enjoy the atmosphere of communal living and country life.

#### **Bockleton Country Study Centre, Nr. Tenbury Wells, Worcestershire**

This Centre has expanded during the past year and up to 60 pupils can now be accommodated at a time. A demountable type building has been erected in the grounds and pupils taking biology now have the benefit of two well-equipped laboratories.

During August Bockleton housed two parties of young under-privileged children from the Midlands for one week. These parties were organised by the W.R.V.S. who provided the staff and food.

### **Stansfeld Country Study Centre, Quarry Road, Headington, Oxford**

In addition to the normal pattern of courses, Stansfeld ran a course for Sixth Formers who intended to take up teaching as a career. Also during August a party of 14 boys and one girl from Frankfurt on an exchange visit organised by this Authority were accommodated and entertained for 10 days. A party of Birmingham pupils acted as hosts during their stay at Stansfeld, where a full programme was arranged for all, including visits to local places of interest and a barbecue supper in the grounds followed by singing round the camp fire.

### **Ogwen Cottage Outdoor Pursuits Centre**

Throughout the year nineteen parties of approximately 30 pupils left Birmingham by coach to spend 11 days at Ogwen Cottage, North Wales, where their activities included instruction in map reading, route finding, mountain walking and scrambling, rock-climbing and mountain rescue. First-aid and personal hygiene also formed part of the courses. The courses held at Ogwen are strenuous and no pupil is permitted to take part unless physically fit. Each pupil is required to attend and pass a special medical examination.

## **CHILDREN IN PART-TIME EMPLOYMENT**

This year 35 children were examined in connection with theatrical licences and all were found to be fit.

There were 2,836 children examined in connection with their part-time employment delivering newspapers, milk, groceries, or in hairdressers.

# INDEX

## A

Abatement of Nuisances, 234  
 Accidents, 23  
 Accident Ambulances, 154  
 Adoption Clinic, 187  
 Adoption of Children, 186  
 Aged, care of, 162  
 Airport—health control, 45  
 Ambulance service, 152  
 Amino Acid Test, 104  
 Analytical laboratory, 62  
 Animal Boarding Establishment, 217  
 Antenatal care—statistics, 98  
 Antenatal clinics, 96, 102, 124  
 Area of City, 16  
 Attendances, Personal and Child Health Centres, 99  
 Atmospheric pollution, 278  
 Audiology clinic, 103

## B

Bakehouses, 198  
 Bathing facilities, 252  
 B.C.G. vaccinations, 50  
 Bed Bureau, 127, 160  
 Birmingham Council for Old People, 164  
 Birmingham Council of Social Service, 164  
 Birmingham Hospital Saturday Fund, 171  
 Births—incidence and rates, 16, 24, 25, 27  
 Blindness, 190  
 Blood tests, expectant mothers, 91  
 Boarded out children, 185  
 Bottle washing, 210

## C

Canal boats, 243  
 Cancer, 21  
 Canteens—factory, 199  
 Canteens—mobile, 199  
 Canteens—school, 198  
 Care of mothers and young children, 88

Care of the aged, 162  
 Catering premises, 198  
 Causes of death, 18, 19  
 Certificates of disrepair, 229  
 Certificates, qualification, 227  
 Cervical cytology, 100  
 Child adoption, 186  
 Children in care, 185  
 Children at risk, 104  
 Children boarded out, 185  
 Child Health clinics, 95  
 Children's Home Nursing Unit, 145  
 Child health centres, 90  
 Chiropody clinic, 93  
 Chiropody Services—Aged 166  
 Churn and bottle washing, 210  
 Clean Air Act, 1956, 284  
 Cleansing Station, 252  
 Clearance areas, 221  
 Clinics—Local Authority, 91, 95  
 Common lodging houses, 241  
 Complaints, Foodstuffs, 199  
 Milk, 205  
 Compulsory removal, 169  
 Congenital malformations, 105  
 Consultation clinics, 96  
 Contacts—tuberculosis, 54  
 Convalescence, recuperative, 171  
 Cream, fresh, 207, 210  
 Cream, imitation, 210  
 Cremations, 195

## D

Dairies, 205  
 Dead animals, 216  
 Deaf-blind, 190  
 Deaf children—audiology clinic 103  
 Death rate, 17, 19, 25, 26, 27  
 Dental health education, 113  
 Dental service, 107  
 Deprived children—medical care 185  
 Diphtheria, 29, 58  
 Diseases, infectious, 47, 251

N.B.—School Health Service items:- pages 290-342.

Disease, Heart, 19, 20

Diseases of Animals Acts, 216

Disinfection after tuberculosis, 251

Disinfestation and disinfection, 251

Domiciliary care of the premature infant, 135

Domiciliary Midwifery, 124

Drainage, 254

Driving Licences —epileptics, 193

Drugs, 62

Dysentery, 30

## E

Eating houses, 198

Egg sampling, 211

Emergency maternity service, 128

Encephalitis, 32

Enforcement section, 236

Environmental health service, 219

Epidemiology, 29

Epilepsy—driving licences, 193

Expectant mothers

postnatal examinations, 92

relaxation classes, 92

Remedial Exercise Clinics, 92

## F

Factories—sanitary accommodation, 271

Factory canteens, 199

Family planning, 93

Fireguards, loan of, 151

First aid—staff, 194

Fluoridation of drinking water, 265

Food and Drugs Act, 1955, 62

Food hawkers, 199

Food hygiene, 196

Food poisoning, 32

Food premises, Food Hygiene Regulations 197

Food premises, inspection, 196

Food preparation premises, 192

Food sampling, 62

Foods, unfit, 215

## G

Game dealers, 205

General practitioners—children's clinics, 137

General Practitioners—Co-operation, 127, 138

## H

Handicapped children, 97, 104

Health Committee, functions of

Sub-Committee, 6

Health Committee members, 5

Health Education, 174

Health talks, 92

Health visiting, 136

Health Visitors' Training Course, 137

Health Visitors—tuberculosis 81

Heating appliances, 270

Heel-prick test, 104

Home Nursing Service, 141

Home Nursing Service, Children's Unit, 145

Horses, 218

Hospital car service, 161

Hospital follow-up—health visitors, 166

Hostels, Housing Department, 138

## I

Ice cream, 208, 211

Iced lollipops, 208, 211

Illegitimacy, 16, 18, 24, 277

Imitation cream, 210

Immigrants, arrival of, 45

Immunisation, 47, 58, 60

diphtheria, 29, 45

poliomyelitis, 41

Importation of Dogs and Cats Order, 229

Imported food, 215

Improvements, compulsory, 224

Improvement grants, 222

Incidence of blindness, 190

Industrial furnaces—smoke, 281

Industrial premises, 271

Infant mortality, 17, 18, 24, 25, 26, 27, 29

Infectious diseases, 47, 251

Infectious diseases—follow-up visits, 251

Infective Jaundice, 37, 47

Inland Rail Port, 202

Inland Road Port, 202

N.B.—School Health Service items:- pages 290-342.



## L

Laboratory Services, 62  
Laundry service, Domiciliary, 150  
Leprosy, 38  
Leptospirosis, 39  
Leukaemia, 22  
Licensed premises, inspection of, 198  
Loan of nursing equipment, 149  
Loan of fireguards, 151  
Local drug testing scheme, 69  
Lodging houses, 241  
Lollipops, iced, 208, 211

## M

Malaria, 39  
Malformations, congenital, 105  
Markets, retail, wholesale, 215  
Maternal mortality, 19, 129  
Maternity bed bureau, 127, 160  
Maternity service—emergency, 128  
Measles, 39  
Meat inspection, 212  
Meat, condemnation of, 214  
Medical examinations—staff, 194  
Medical Officer for Staff Welfare, 194  
Meningitis, Acute, 40  
Midwifery—domiciliary, 124  
Milk and dairies, 205  
Milk dispensing machines, 206  
Milk sampling, 62, 209  
Milk vending machines, 206  
Mobile canteens, 199  
Mobile shops, 199  
Motor Vehicle (Driving Licences) Regulations, 1970, 193  
Multi-occupation, housing, 230

## N

National Assistance Acts, 169  
National Health Service Act:—  
Section 22—Care of mothers and young children, 88  
Section 23—Midwifery, 124  
Section 24—Health visiting, 136

Section 25—Home nursing, 141  
Section 26 and 28—Immunisation and vaccination, 48  
Section 27—Ambulance service, 152  
Section 28—Prevention of illness, care and after care, 162  
Noise Control, 275  
Nuisances—abatement of, 234  
Nuisances, urgent, 235  
Nurses' agencies, 184  
Nursing equipment, loan of, 149  
Nursing homes, 184

## O

Observation Register, 104  
Orthoptic Screenings, 102  
Outworkers, 273  
Offices, Shops and Railway Premises, supervision of, 247

## P

Paratyphoid fever, 40  
Partially sighted, 190  
Parent and Child Centre, 183  
Personal and Child Health centres, 90  
Personal safety, 270  
Pet shops, 217  
Pigeon control, 246  
Pig keepers, 216  
Points scheme, 173  
Poliomyelitis, 41  
Poliomyelitis immunisation, 48, 58  
Pollution, atmospheric, 278  
Population, City, 16  
Population by wards, 27  
Postnatal clinics, 92, 130  
Premature infants—Domiciliary care, 135  
Prevention of Damage by Pests Act, 1949, 243  
Prevention of illness, care and after-care, 162  
Priority rehousing, 173  
Psittacosis, 41  
Public Health Inspection, 219  
abatement of nuisances, 234  
canal boats, 243  
clearance areas, 221  
certificates of disrepair, 229

- common lodging houses, 241
- disinfestation and disinfection, 251
- enforcement section, 236
- houses in multiple occupation, 230
- improvement grants, 222
- infectious diseases, 251
- inspections, 219
- prevention of damage by pests, 243
- Rag Flock and Other Filling Materials Act, 1951, 247
- Rent Restriction Acts, 230
- staff, 219
- supervision of shops, 247
- tips and tipping, 242
- urgent nuisances, 235
- Public Health Laboratory Service, 77

## R

- Radiological examination of water, 265
- Rag Flock and Other Filling Materials Act, 1951, 247
- Recuperative convalescent care, 171
- Refreshment houses, 253
- Refuse collection and disposal, 258
- Rehousing, 82, 173
- Relaxation classes, 92, 98, 126
- Rent Restriction Acts, 230
- Riding establishments, 218
- Rodent control, 243
- Routine Sampling of Corporation Water, 264
- Rubella, 47

## S

### SCHOOL HEALTH SERVICE

- Adult Examinations, 340
- After Care Section, 328
- Ascertainments (placing of handicapped children), 327
- Asthma Clinic 306
- Audiometric Survey, 313
- Child Guidance Service, 334
- Chiropody, 304
- Convalescent Treatment, 312
- Country Study Centres, 341

- Employment and After Care of the Handicapped, 329
- Employment of Children—Part-time, 342
- Extra District Children attending Birmingham Schools, 326
- Eye Defects, 303
- Follow-up and Home Visiting, 298
- General Information, 292
- Handicapped Children—Employment, 329
- Health Education, 300
- Home Teaching Service, 334
- Home Visiting, 298
- Immigrant Children—Medical Examination of, 296
- Maintained Special Schools—Numbers on Register, 325
- Medical Inspection and Treatments, 294, 318
- Minor Ailments and Inspection Clinics, 295
- Milk in Schools, 339
- Non-Maintained Special Schools—Numbers on Register 327
- Nursery Schools and Classes, 300
- Nursing Assistants—Work of, 302
- Nursing Staff—Work of, 298
- Ophthalmic Examinations, 303
- Orthopaedic Defects, 309
- Outdoor Pursuits Centres, 341
- Partially Sighted—Schools for, 327
- School Buildings, 338
- School Clinics—Summary of Work, 312
- School Meals, 338
- Special Examination Results, 326
- Special Services, Sub-Committee Members, 290
- Special Schools—Medical Supervision, 325
- Speech Therapy, 316
- Speech Therapy in Special Schools, 333
- Staff, 293
- Staff—Manual and Non-Manual—Medical Examination, 340
- Statistics, Medical, 318
- Summary of Work, 312
- Ultra Violet Ray Treatment, 298
- Vision Surveys, 299

N.B.—School Health Service items:— pages 290-342.

Salvage and refuse collection, 258

Sampling of:—

corporation water, 72, 264

egg, 211

food and drugs, 62

milk, 62, 209

swimming bath water, 269

Scabies, 42

Scarlet fever, 42

School canteens, kitchens, etc., 198

School children—B.C.G. vaccination, 50

Screening tests, 100

Sewerage, 255

Sewing classes, 92

Shellfish, 212

Shops, supervision of, 247

Slaughterhouses, 212

Smallpox, 43

Smallpox vaccination, 56

Smoke control programme, 278

St. John Ambulance Brigade, 161

Staff, 8

Staff—medical examinations, 194

Statistics:—

care of aged, 165

Child Health, 95

Children in care, 187

dental service, 116

health visitors, 140

Home Nursing Service, 146

midwifery, 130

tuberculosis, 82

vital, 16

Stillbirths, 17

Suicides, 19

Supervision of offices, shops and railway premises, 247

Supervision of industrial premises, 271

Swimming bath water—sampling of, 269

## T

Tetanus, 43

Tips, 242

Town and Country Planning Acts, 273

Training of health visitors, 137

Training of pupil midwives, 127

Tuberculosis, 78

B.C.G., 50

contacts, 54

disinfection, 251

follow up, 81

mortality, 80

rehabilitation, 82

rehousing, 82

statistics, 82

visitors, 81

Typhoid, 43

## U

Unfit houses, 221

Urgent nuisances, 235

## V

Vaccination

B.C.G., 50

smallpox, 56

yellow fever, 57

Verminous premises, articles and persons, 251

Veterinary section, 212

Veterinary Services, 216

Vital Statistics, 16

Voluntary workers Organisation, 139, 143, 161  
164

## W

Water:—

fluoridation of drinking water, 265

dwellings without internal supply, 266

radioactivity, 265

sampling of, 72, 264

swimming bath, 269

supply, 262

private wells, 266

Welfare of the blind, 190

Welfare of the aged, 162

Wells, 265

Whooping cough, 44

## Y

Yellow fever vaccination, 44, 57

Yoghourt, 209

N.B.—School Health Service items:— pages 290-342.







